



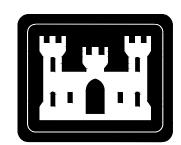
US Army Corps of Engineers Alaska District

# WEST MARGINAL FLOAT REPLACEMENT SELDOVIA, ALASKA THE FOLLOWING PLAN SET CONTAINS AND DOCUMENTING CHANGES TO THE PROJECT TO HAVE BEEN MADE DURING CONSTRUCT MARRIED AND DEFINITION AND DE

THE FOLLOWING PLAN SET CONTAINS ANNOTATIONS & DOCUMENTING CHANGES TO THE PROJECT REPORTED TO HAVE BEEN MADE DURING CONSTRUCTION. THESE MARKUPS ARE BASED REDLINES AND RECORDS PROVIDED BY HARRIS SAND & GRAVEL. ANNOTATIONS PREPARED BY MOFFATT & NICHOL ARE FOR INFORMATION PURPOSES ONLY.

BID SET, 14 FEB 2014 AKV292 P2 NO. 326049

# WEST MARGINAL FLOAT REPLACEMENT



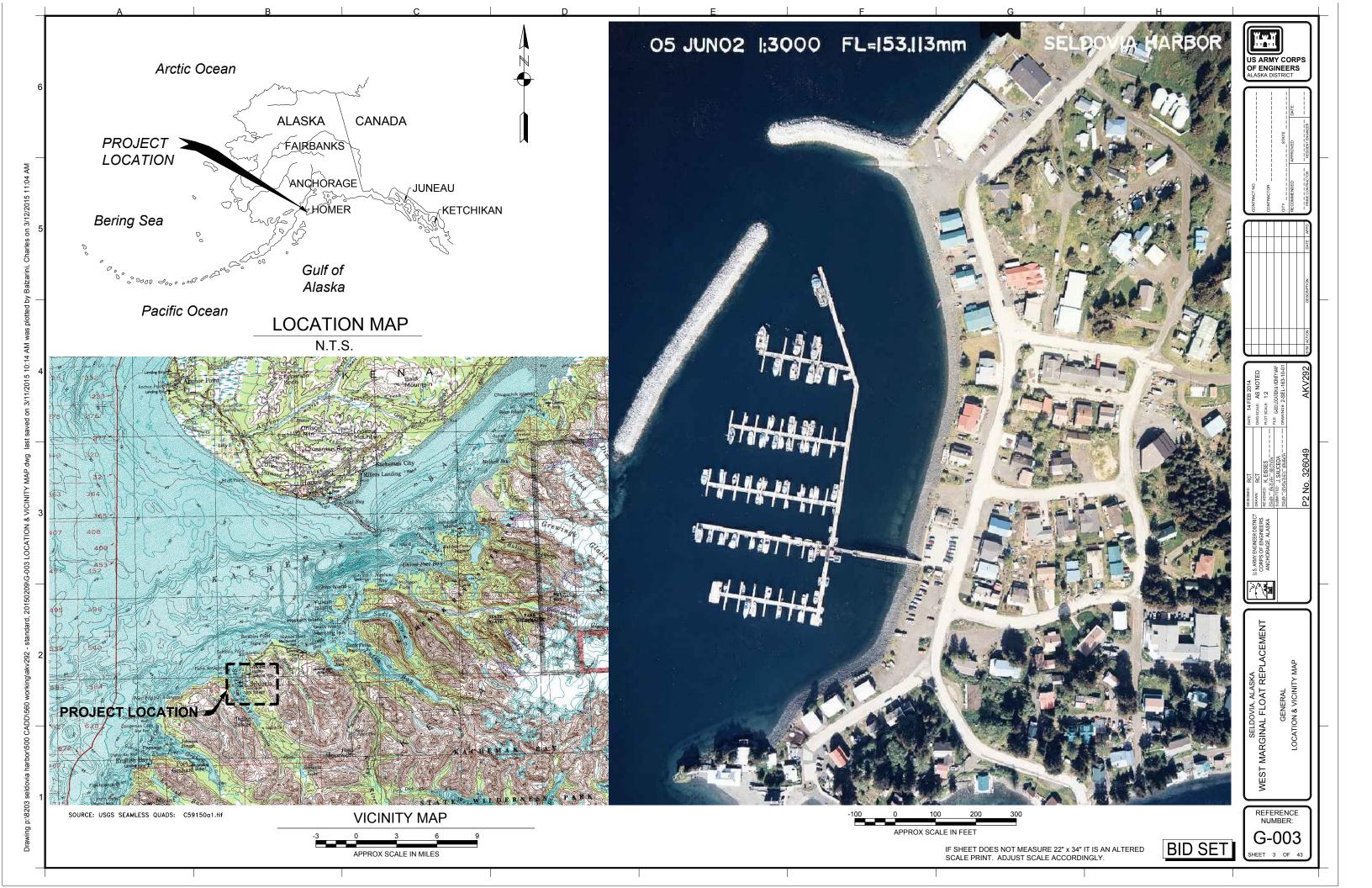
SELDOVIA, ALASKA BID SET - AKV292, 14 FEB 2014



# ALASKA DISTRICT U.S. ARMY CORPS OF ENGINEERS

# SCHEDIII E OE DRAWINGS

3.				SC	HE	DI	<b>JLE</b>	E OF DRA	WINGS				
SHT	REF. NUM.	SHEET TITLE	SHT RE	EF. SHEET TITLE	SHT	r REF	F. M.	SHEET TITLE	SHT REF. NUM.	SHEET TITLE	SHT	. REF. NUM.	SHEET TITLE
GEN	RAL: GEN	ERAL		CAL: GENERAL									
1		COVER SHEET		001 EQUIPMENT SCHEDULE AND SCOPE OF WORK									
2		INDEX SHEET		CAL: PLANS									
_		LOCATION & VICINITY MAP		100 SITE PLAN AND RISER PLANS									
_	G-004 : PLANS	GENERAL NOTES & ABBREVIATIONS		CAL: DETAILS  300 PIPING DETAILS I									
		EXISTING SITE & DEMOLITION PLAN		301 PIPING DETAILS II									
<u> </u>		NEW FLOAT LAYOUT	ELECTRICA										
		CALE VIEWS		101 SITE PLAN									
0		EXISTING FLOAT DECK PLAN		102 ENLARGED DETAIL A									
CIVIL	: РНОТОЅ			103 ENLARGED DETAIL B									
8 ₹	C-901	SITE AND CONDITION PHOTOS FROM APRIL 2012 UNO		104 ENLARGED DETAIL C									
_		MISCELLANEOUS DETAIL PHOTOS FROM APRIL 2012		105 ENLARGED DETAIL D									
0		UTILITY PHOTOS FROM APRIL 2012		106 NEW WORK -DETAIL A									
S1	CTURAL: F			107 NEW WORK-DETAIL B									
_		OPTION 1 - SEAPLANE FLOAT SECTIONS		108 NEW WORK-DETAIL C									
		MARGINAL FLOATS		109 NEW WORK-DETAIL D									
_		LARGE-SCALE VIEWS		110 NEW WORK - SEAPLANE FLOAT									
s —		MODULE M-1		AL: DETAILS									
70		MODULES M-2 THRU M-8 & M-11 THRU M-15	38 E-1	111 SINGLE LINE DIAGRAM, PANEL SCHEDULE, FIXTURE SC	HEDULE								
~		MODULE M-9	39 E-1	112 MISCELLANEOUS DETAILS I									
si 🗀		MODULE M-10	40 E-1	113 MISCELLANEOUS DETAILS II									
ī —		MODULE M-16	41 E-1	114 NEW POWER PEDESTAL AND MAIN FLOAT LIGHTING	DETAILS								
v —	CTURAL: [		42 E-1	115 ELECTRICAL DETAILS I									
> —		MISC DETAILS I	43 E-1	116 ELECTRICAL DETAILS II									
		MISC DETAILS II		1									
$\sim$		MISC DETAILS III											
		MISC DETAILS IV											
22		OPTION 1 - SEAPLANE FLOAT DETAILS I											
23	S-506	OPTION 1 - SEAPLANE FLOAT DETAILS II											
	1												
767													
AK GK													
Z.													
×													
000/													
ADD													
3													
drb													
D)													
Opla													
ž S													
070													
i.													
													D
š													Drawing # 2-SEL-163-10-01 Sheet 2 of 4



# **GENERAL NOTES**

# SCOPE OF WORK: THIS PROJECT INCLUDES RENOVATIONS TO THE SMALL BOAT HARBOR INCLUDING THE

REMOVAL OF THE EXISTING WEST MARGINAL FLOAT AND ASSOCIATED PILING. NEW FLOATS SHALL BE PROVIDED AND INSTALLED USING THE EXISTING PILING. INSTALLATION OF NEW ELECTRICAL AND POTABLE WATER SERVICE FOR THIS FLOAT AND TIE-IN TO THE EXISTING MAIN FLOATS WILL REMAIN IN PLACE

# STAGING AREA:

NO STAGING AREA IS DESIGNATED. COORDINATE WITH THE CITY OF SELDOVIA IF REQUIRED. THE CITY MANAGER MAY BE REACHED BY EMAIL @ citymanager@cityofseldovia.com OR BY PHONE AT (907) 234-7643.

### SCHEDULE AND COORDINATION:

- PHYSICAL WORK AT THE HARBOR SITE SHALL BE COMPLETED DURING THE MONTHS OF NOVEMBER THROUGH MARCH, INCLUSIVE. THERE IS A PERMIT STIPULATION PREVENTING PILE DRIVING DURING THE PERIOD FROM 1 APRIL THROUGH 30 JUNE. ACCESS SHALL BE MAINTAINED TO E FLOAT AT ALL TIMES. WORK SCHEDULES SHALL BE COORDINATED WITH THE HARBOR MASTER. (907) 234-7886. PROVIDE A SCHEDULE OF ALL CONSTRUCTION ACTIVITY FOR REVIEW AND APPROVAL PRIOR TO MOBILIZING TO THE SITE.
- IF OPTION 1 SEAPLANE FLOAT IS AWARDED, COORDINATE WITH THE HARBOR MASTER IF CLOSURE OF E FLOAT IS REQUIRED FOR SHORT PERIODS.

- THE CONTRACTOR SHALL PREPARE AND SUBMIT A PILE DRIVING PLAN. THIS PLAN SHALL INCLUDE THE FOLLOWING
- A LIST OF PILE DRIVING EQUIPMENT INCLUDING BOTH AN IMPACT AND VIBRATORY HAMMER
- RECORD KEEPING PROCEDURES
- A DESCRIPTION OF METHODS TO PROPERLY ALIGN THE PILING INCLUDING ANY TEMPI ATES
- THE MINIMUM DRIVING ENERGY FOR THE IMPACT HAMMER SHALL BE 40,000 FOOT POUNDS. VIBRATORY HAMMER SHALL HAVE A MINIMUM ECCENTRIC MOMENT OF 2,500 INCH-POUNDS AND A MINIMUM SUSPENDED WEIGHT OF 8,500 POUNDS.
- TO AVOID DAMAGE TO THE PILING, PILE DRIVING SHALL CEASE WHEN THE ADVANCEMENT OF THE PILE REQUIRES MORE THAN 10 BLOWS TO THE INCH FOR IMPACT HAMMERS OR RATE OF PENETRATION IS LESS THAN 2 FEET PER MINUTE FOR VIBRATORY HAMMERS.
- PILING SHALL BE DRIVEN WITH A TEMPLATE LINED WITH PLASTIC OR TIMBER BEARING SURFACE.
- TOP ELEVATION: PILES SHALL BE CUT-0FF (WHERE REQUIRED) AT ELEVATION +35' MLLW. WHERE INSTALLATION REQUIREMENTS LEAVE THE TOP OF PILE ELEVATION LOWER THAN +35' MLLW. NOTIFY THE OWNER'S REPRESENTATIVE WHO WILL PROVIDE DIRECTION.
- DRIVING REQUIREMENTS (EXCEPT SOCKETED PILES AND SEAPLANE FLOAT PILES): INSTALL PILES TO A MINIMUM OF 20' OF EMBEDMENT OR TO REFUSAL WITH THE DESIGNATED IMPACT HAMMER. SEAPLANE FLOAT PILES SHALL BE REUSED AND SHALL BE INSTALLED TO A TOP ELEVATION OF +35' MLLW WITH A MAXIMUM CUT-0FF OF 1'.
- DRIVING REQUIREMENTS FOR SOCKETED PILES: PILES SHALL BE SOCKETED 12' INTO BEDROCK. TOP OF BEDROCK ELEVATION SHALL BE ESTABLISHED BY PROBING TO REFUSAL WITH THE DESIGNATED IMPACT HAMMER. PROBE PILE SHALL BE FROM THE CITY'S STOCKPILE OF PILES AND MAY BE USED IN THE WORK IF NOT DAMAGED BY PROBING OPERATIONS. ONLY ONE PILE FOR PROBING SHALL BE ALLOWED. HOLES UP TO 16" Ø MAY BE PREDRILLED THROUGH THE NEW/EXISTING PILE SLEEVES TO FACILITATE THIS WORK. DRILLED SOCKET SHALL BE CLEANED OF OBSTRUCTIONS, PILE DRIVEN TO BOTTOM OF SOCKET, AND ANNULUS BACKFILLED W/ 3/8" MINUS SAND OR CRUSHED AGGREGATE FULL DEPTH OF SOCKET TO MUDLINE. SEE PILE SPLICE DETAIL, K/S-504 FOR INCIDENTAL SPLICING OF PILES REQUIRED FOR THIS WORK
- EXISTING PILES, BOTH THOSE IN PLACE AND IN THE CITY'S STOCKPILE ARE 12 3/4" Ø x 3/8" WALL THK, HDG PIPE PILES WITH A 1" TOTAL THK INSIDE FLANGED (OUTSIDE FLUSH) DRIVING SHOE. INSTALLED LENGTHS ARE SHOWN ON THE DRIVING LOGS IN SECTION 01 19 40.00 29. STOCKPILED PILES ARE 75' LONG.
- DRILLING AND DRIVING TOLERANCES:
- MAXIMUM VARIATION FROM VERTICAL: ½" IN 4'-0" MAXIMUM VARIATION FROM TOP OF PILE ELEVATION: ± 3"
- MAXIMUM HORIZONTAL OUT-OF-POSITION: 3" FROM CENTER OF MOORING RING WITH WATER LEVEL AT +5.0 MLLW OR LOWER
- PILE CUTOFFS SHALL BE DISPOSED OF LEGALLY OFF-SITE BY THE CONTRACTOR, OFF OWNER PROPERTY. DISPOSAL OF CUTOFFS SHALL BE AT THE CONTRACTOR'S EXPENSE, AND IS INCIDENTAL TO THE WORK

# TIMBER MATERIALS:

- ALL TIMBER COMPONENTS SHALL BE COASTAL REGION DOUGLAS FIR #1 OR BETTER
- ALL GLULAM MEMBERS SHALL BE STRESS CLASS 24F-1.8E OR COMBINATION SYMBOL 24F-V8. DF/DF. BALANCED LAYUP
- PLYWOOD SHALL BE 11/8" THICK, GRADE C-C EXTERIOR, GROUP 1 SPECIES, APA CUSTOM PRODUCT V-611

# 6. TIMBER PRESERVATIVE TREATMENT:

- a. ALL TIMBER MATERIALS SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA U1 AS
- b. SEAPLANE FLOAT DECK PANELS, GLULAM BULLRAILS, MILLED DECKING, AND ALL OTHER TIMBER MATERIALS ABOVE DECK LEVEL SHALL BE TREATED TO AWPA-U1 USE CLASS 4B (SALT SPLASH ZONE) AZCA 0.6 PCF NET SALT RETENTION.
- STRINGERS AND UNDER DECK FRAMING MEMBERS SHALL BE TREATED TO AWPA-U1 USE CLASS 5A (SALT WATER IMMERSION) AZCA 2.5 PCF NET SALT RETENTION.
- d PLYWOOD SHALL BE PRESERVATIVE TREATED WITH CCA OR ACZA TO 0.6 PCF
- TIMBER MEMBERS SHALL BE CUT TO LENGTH, DRILLED AND DAPPED PRIOR TO PRESSURE TREATING. ALL FIELD CUTS, NICKS, ABRASIONS AND HOLES SHALL BE SATURATED WITH COPPER NAPTHENATE SOLUTION. COPPER NAPTHENATE SOLUTION SHALL BE FIELD APPLIED USING A CHEMICAL RESISTANT SPRAYER SUCH AS THE SOLO MODEL 465.
- CREOSOTE TREATMENT OF TIMBERS IS UNACCEPTABLE.

### 7. TIMBER FASTENERS:

- a. ALL TIMBER CONNECTION BOLTS SHALL BE ASTM A 307 GRADE A, UNO. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A 153. ALL BOLTS IN CONTACT WITH WOOD MEMBERS SHALL HAVE ECONOMY HEADS AND OR MALLEABLE IRON WASHERS UNLESS OTHERWISE NOTED. WASHER SIDE LENGTH OR DIAMETER SHALL BE AT LEAST 4 TIMES THE BOLT DIAMETER. WASHER THICKNESS SHALL BE EQUAL TO ONE HALF THE BOLT DIAMETER.
- USE #14 x 4", PASSIVATED 316 SERIES STAINLESS STEEL, FLAT HEAD, SELF-DRILLING WOOD SCREWS FOR DECKING ATTACHMENT, 2 SCREWS PER STRINGER, UNO. SCREWS SHALL BE McFEELY'S ITEM No. 1440-SD6, OR APPROVED EQUAL. PRE-DRILL PILOT HOLES IN TIMBERS AS REQ'D PER A.I.T.C. TO PREVENT SPLITTING. PILOT HOLES SHALL BE PRE-DRILLED AT ALL LOCATIONS WHERE EDGE OR END SPLITTING COULD OCCUR.

### 8. TIMBER CONSTRUCTION:

INSTALL DECKING HEART SIDE DOWN

# STRUCTURAL WELDING:

WELDERS SHALL BE QUALIFIED AS SPECIFIED IN AWS FOR THE PARTICULAR PROCESS AND PROCEDURE THAT THE WELDER WILL PERFORM. PROCEDURE QUALIFICATION TEST RECORDS FOR THE MATERIAL AND PROCEDURE PERFORMED WILL BE REQUIRED IN ACCORDANCE WITH AWS D1.1 SECTION 4.1.3. SUBMIT WELDER CERTIFICATIONS

# 10. EXISTING FLOATS:

THE EXISTING FLOATS CONSIST OF NON-CREOSOTE PRESERVATIVE TREATED 8x8 BUILL RAILS. 4x8 SCUPPERS, AND 2x10 DECKING. TIMBERS BELOW DECK LEVEL ARE CREOSOTE TREATED. EXTERIOR STRINGERS ARE 6x8s WITH TWO 4x6 INTERIOR STRINGERS. 6x6 TRANSVERSE FRAMING IS PROVIDED BETWEEN COATED POLYSTYRENE FOAM FLOATATION BILLETS. FLOATS ARE "CONTINUOUS" WITH BOLTED JOINTS THROUGH THE BULLRAILS, BLOCKING (SCUPPERS) AND STRINGERS. THE ANGLED JOINT (IN PLAN VIEW) ALSO INCLUDES STEEL BACK-UP PLATÉS ON THE STRINGERS AND BULLRAILS.

# 11. GALVANIZING

ALL STEEL ITEMS SHALL BE HOT-DIPPED GALVANIZED, AFTER FABRICATION, PER ASTM A-123 WITH MINIMUM AVERAGE COATING THICKNESS INCREASED TO 6 MILS. STEEL HARDWARE INCLUDING LAG AND ALL OTHER BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED PER ASTM A-153. GALVANIZING DAMAGED FROM SHIPPING, HANDLING, WELDING, CUTTING OR BY OTHER MEANS SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780, USING ZINC-BASE SOLDERS. SUCH AS "GALV-STICK" OR APPROVED EQUAL, FOLLOWED BY A TOP COAT OF ZINC RICH PAINT. REPAIR SHALL FOLLOW PROCEDURES INDICATED IN ASTM A780, ANNEX A1, AND IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. REPAIRED AREAS SHALL HAVE A MINIMUM DRY FILM COATING THICKNESS OF 6 MILS TESTED PRIOR TO TOP COATING.

# 12. FIELD WELDING:

PREHEAT STEEL TO A MINIMUM 50°F TO DRIVE OFF MOISTURE AND WELD PER AWS D1.1.

# 13. TIDAL DATA, SELDOVIA, ALASKA

TIDAL EPOCH STATION ID: 9455500

STATION NAME SELDOVIA, COOK INLET ALASKA

NOAA CHART USGS QUAD (1:63.000): SELDOVIA B-5

ELEVATIONS OF DATUMS REFERRED TO MEAN LOWER LOW WATER (MLLW), IN FEET:

HIGHEST OBSERVED WATER LEVEL (10/15/1966)	=	25.25
MEAN HIGHER HIGH WATER (MHHW)	=	18.04
MEAN HIGH WATER (MHW)	=	17.23
MEAN SEA LEVEL (MSL)	=	9.52
MEAN TIDE LEVEL (MTL)	=	9.46
MEAN LOW WATER (MLW)	=	1.70
MEAN LOWER LOW WATER (MLLW)	=	0.00
LOWEST OBSERVED WATER LEVEL (04/27/2002)	=	-6.47

# **ABBREVIATIONS**

@ #	AT NUMBER	MAX	EL SHAPE FROM THE MISCELLANEOUS SECTION MAXIMUM
&	AND	MBR(S)	MEMBERS(S)
2L 4x ASZ	DOUBLE ANGLE 4x ACTUAL SIZE @ DWG SCALE	MI MILS	MALLEABLE IRON THOUSANDTHS OF AN INCH
Ę	CENTERLINE	MIN	MINIMUM
Ø	DIAMETER, ROUND	MISC	MISCELLANEOUS
		MIW	MALLEABLE IRON WASHER
AB ACZA	ANCHOR BOLT AMMONIACAL COPPER ZINC	MPa MPH	MEGAPASCAL(S) MILES PER HOUR
ACZA	ARSENATE	MT	STRUCTURAL TEE FROM THE M SERIES
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION		SECTION
AKDOT	ALASKA DEPARTMENT OF	N	NORTH
	TRANSPORTATION	NIC	NOT IN CONTRACT
ALUM APA	ALUMINUM AMERICAN PLYWOOD ASSOCIATION	NO. NOM	NUMBER NOMINAL
APPROX	APPROXIMATELY	NPS	NOMINAL PIPE SIZE
ASTM	AMERICAN SOCIETY FOR TESTING	NS	NEAR SIDE
A14/C	AND MATERIALS	NTS	NOT TO SCALE
AWS	AMERICAN WELDING SOCIETY	ОС	ON CENTER
BJ	BAR JOIST	OD	OUTSIDE DIAMETER
BLDG	BUILDING	OPP	OPPOSITE
BLKG	BLOCKING	OVS	OVERSIZED HOLES
BOTT BP	BOTTOM BASE PLATE	PC	POINT OF CURVATURE
DF	BASE PLATE	PFH	PHILLIPS FLAT HEAD
С	AMERICAN STANDARD CHANNELS	PJP	PARTIAL JOINT PENETRATION
CCA	CHROMATED COPPER ARSENATE	PL	PLATE(S)
CHKR	CHECKER	PLF PSI	POUNDS PER LINEAR FOOT
CIP CJP	CAST IN PLACE COMPLETE JOINT PENETRATION	PSI PT	POUNDS PER SQUARE INCH POINT OF TANGENCY
CL	CENTERLINE		. S Of Princetton
CLR	CLEAR	R	RADIUS
CMU	CONCRETE MASONRY UNIT	RBW	RUBBLEMOUND BREAKWATER
CONC CONN(S)	CONCRETE CONNECTION(S)	REBAR REINF	REINFORCING STEEL BAR(S) REINFORCING, REINFORCEMENT, REINFORCE
CONT	CONTINUOUS	REQD	REQUIRED
	COORDINATES	RO	ROUGH OPENING
CP	COMPLETE PENETRATION	RP	RADIUS POINT
CSC	COUNTERSINK, COUNTERSUNK	RS	RUB STRIP
DET(S)	DETAIL(S)	S	AMERICAN STANDARD STEEL SHAPE, SOUTH
DICA	DRILL-IN-CONCRETE-ANCHOR	· ·	SPACING
DIST	DISTANCE	SCHED	SCHEDULE
DO	DITTO	SECT	SECTION
DWG(S)	DRAWING(S)	SHT SIM	SHEET SIMILAR
(E)	EXISTING	SLH	SHORT LEG HORIZONTAL
EA	EACH	SLV	SHORT LEG VERTICAL
EF .	EACH FACE	SOG	SLAB ON GRADE
EL EW	ELEVATION, EARTHQUAKE LOAD EACH WAY	SPEC SQ	SPECIFICATION SQUARE
EXP	EXPANSION	SS	STAINLESS STEEL
EXT	EXTERIOR	SSL	SHORT-SLOTTED HOLE(S)
6	OOMBREOON/F OTBENOTH	ST	STRUCTURAL TEE FROM THE S SERIES
fc FAB	COMPRESSIVE STRENGTH	STD	SECTION STANDARD, STANDARD WEIGHT PIPE
FBW	FABRICATION FLOATING BREAKWATER	STL	STEEL STANDARD WEIGHT FIFE
FF	FINISH FLOOR	STRGR	STRINGER
FH	FLAT HEAD	SYM	SYMMETRICAL
FIO	FOR INFORMATION ONLY	-	TOD
FLR FRT	FLOOR FIRE RETARDANT TREATED	T T&B	TOP TOP & BOTTOM
FS	FAR SIDE	THK	THICK(NESS)
		THRU	THROUGH
GALV	GALVANIZED	TOC TRANS	TOP OF CONCRETE TRANSVERSE
Н	HIGH	TYP	TYPICAL
HAS	HEADED ANCHOR STUD		
HDG	HOT-DIPPED GALVANIZED	UNO	UNLESS NOTED OTHERWISE
HGT	HEIGHT	UHMW-PE	ULTRA HIGH MOLECULAR WEIGHT
HOR HS	HORIZONTAL HIGH-STRENGTH	USACE	POLYETHYLENE U.S. ARMY CORPS OF ENGINEERS
HSB	HIGH-STRENGTH BOLT	30/ lOL	The state of the s
HSS	HOLLOW STRUCTURAL SECTION	VERT	VERTICAL
INIT	INTERIOR	W	W SEDIES SECTION WEST WIDE
INT	INTERIOR	W/	W SERIES SECTION, WEST, WIDE WITH
JT	JOINT	W/O	WITHOUT
JST	JOIST	WL	WORK LINE
V ET	KID FEET	WP	WORK POINT
K-FT KIP	KIP-FEET 1,000 POUNDS	WT	WEIGHT, STRUCTURAL TEE FROM W SERIES SECTION
kN	KILONEWTON(S)	WWF	WELDED WIRE FABRIC
	• •		
L	ANGLE, LONG	XS	EXTRA-STRONG WEIGHT PIPE
LBS LLH	POUNDS LONG LEG HORIZONTAL	XXS	DOUBLE-EXTRA-STRONG WEIGHT PIPE
LLH LLV	LONG LEG HORIZONTAL LONG LEG VERTICAL	YD	YARD
LONG	LONGITUDINAL	YD³	CUBIC YARD

IF SHEET DOES NOT MEASURE 22" x 34" IT IS AN ALTERED SCALE PRINT. ADJUST SCALE ACCORDINGLY.

BIDSEL

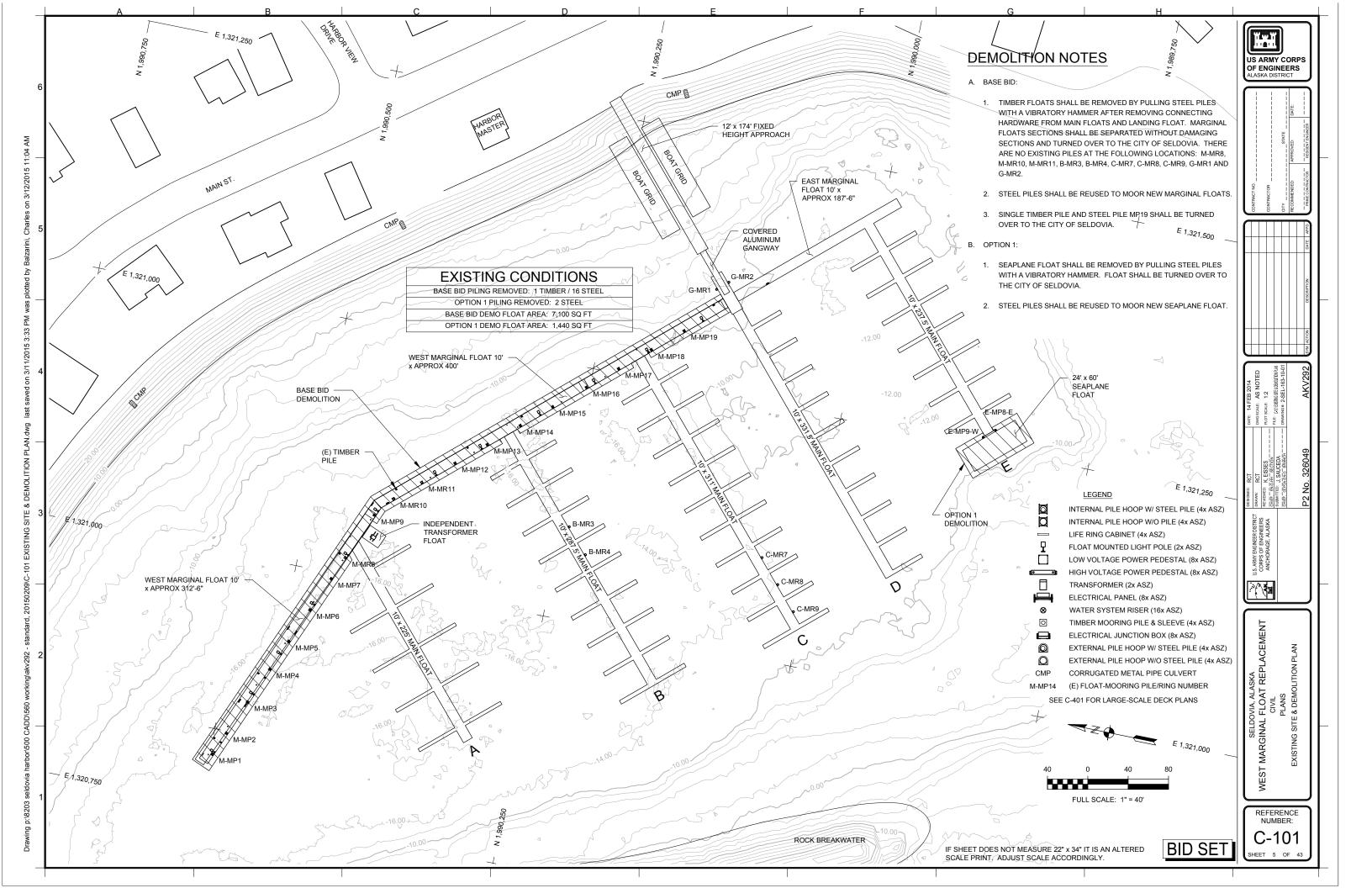
REFERENCE NUMBER: G-004

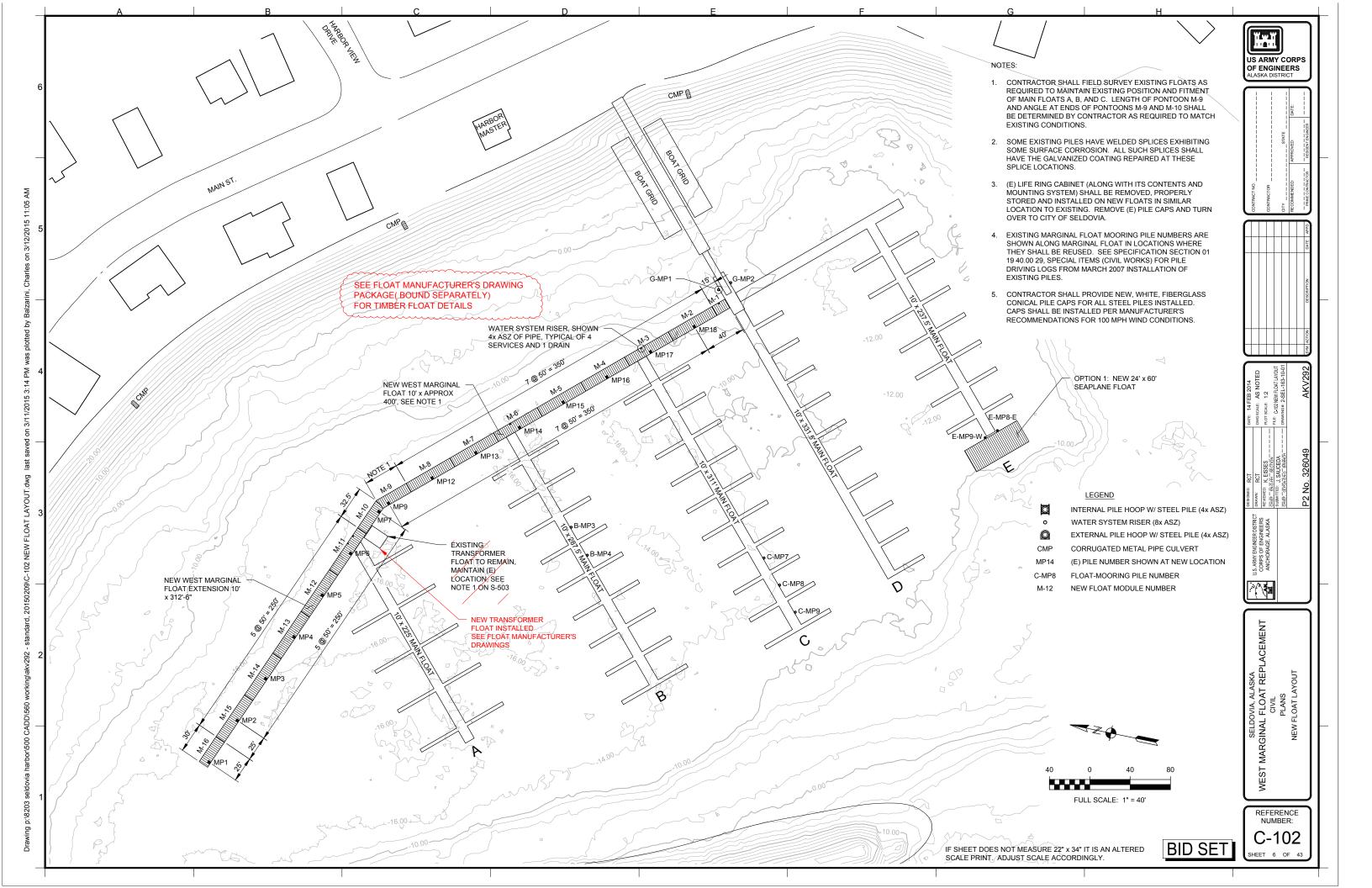
SHEET 4 OF 43

YwY

JS ARMY CORPS OF ENGINEERS

ASKA DISTRICT





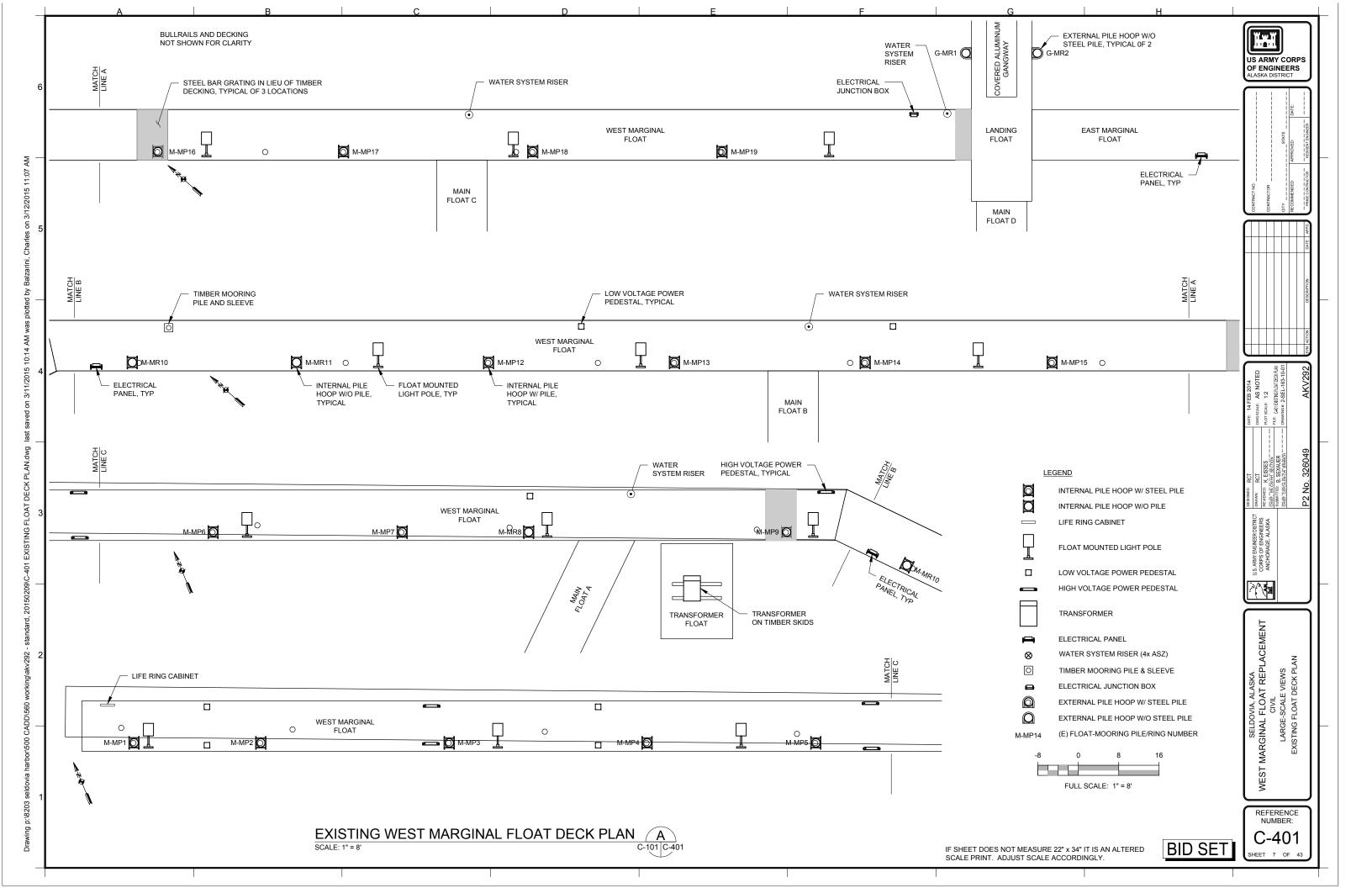




PHOTO 1: OBLIQUE VIEW OF HARBOR FROM SOUTH. PHOTO TAKEN 29 APRIL 2010.



PHOTO 4: BOTTOM OF GANGWAY AND LANDING FLOAT.

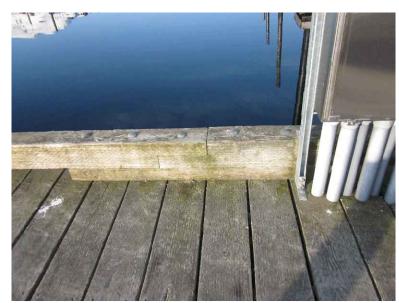


PHOTO 7: TYPICAL SPLICE BETWEEN FLOAT MODULES.



PHOTO 2: LOW TIDE VIEW OF GRID, GANGWAY, D AND C FLOATS. ESTIMATED WATER EL = -4 FEET MLLW. PHOTO TAKEN 29 APRIL 2010.



PHOTO 5: LANDING FLOAT AND END OF WEST MARGINAL FLOAT FROM WEST MARGINAL FLOAT, LOOKING EAST.



PHOTO 8: STOCKPILE OF 12 % % x % WALL THK x 75' LONG PIPE PILES. NOTE LIFTING LOOPS AT BOTH ENDS.



PHOTO 3: SEAPLANE FLOAT VIEWED FROM NEAR END OF E FLOAT.



PHOTO 6: ALUMINUM HANDICAP RAMP WITH GANGWAY AND STAIR BETWEEN PILES M-MP6 AND M-MP7, LOOKING WEST. RAMP TO BE MOVED BY OTHERS.



PHOTO 9: TYPICAL CORROSION OF WELDED PILE SPLICE. REPAIR AS SPECIFIED FOR ALL PILES INSTALLED BY THIS PROJECT.

IF SHEET DOES NOT MEASURE 22" x 34" IT IS AN ALTERED SCALE PRINT. ADJUST SCALE ACCORDINGLY.



REFERENCE NUMBER:

SHEET 8 OF 43

US ARMY CORPS OF ENGINEERS ALASKA DISTRICT





PHOTO 13: CLOSE-UP OF B-FLOAT CONNECTION PLATE.





PHOTO 11: CLOSE-UP OF A-FLOAT CONNECTION PLATE.



PHOTO 14: C-FLOAT CONNECTION TO WEST MARGINAL FLOAT. TAKEN FROM WEST MARGINAL FLOAT.



PHOTO 17: TYPICAL EXTERNAL PILE HOOP.



PHOTO 12: B-FLOAT CONNECTION TO WEST MARGINAL FLOAT. TAKEN FROM WEST MARGINAL FLOAT.



PHOTO 15: CLOSE-UP OF C-FLOAT CONNECTION PLATE.



PHOTO 18: TYPICAL WELDMENT CONNECTING TRANSFORMER FLOAT TO WEST MARGINAL FLOAT. TAKEN FROM TRANSFORMER FLOAT.

IF SHEET DOES NOT MEASURE 22" x 34" IT IS AN ALTERED SCALE PRINT. ADJUST SCALE ACCORDINGLY.



REFERENCE NUMBER:

C-902

SHEET 9 OF 43

US ARMY CORPS OF ENGINEERS ALASKA DISTRICT



PHOTO 19: ANGLE POINT IN WEST MARGINAL FLOAT. TAKEN LOOKING NORTHWEST. NOTE LOW VOLTAGE PEDESTAL, WOODEN PILE, HIGH VOLTAGE PEDESTAL AND TRANSFORMER.



PHOTO 20: ELECTRICAL JUNCTION BOX NEAR BASE OF GANGWAY.



PHOTO 21: TYPICAL HIGH VOLTAGE PEDESTAL.



PHOTO 22: TYPICAL EXISTING TIMBER LIGHT POLE TO BE RE-USED.



PHOTO 23: TYPICAL ELECTRICAL POWER FEED AND JUNCTION BOX AT BASE OF TIMBER LIGHT POLE.



PHOTO 24: TYPICAL LIGHT FIXTURE AND BIRD SPIKES AT TOP OF TIMBER LIGHT POLES.



PHOTO 25: ELECTRICAL PANEL D.





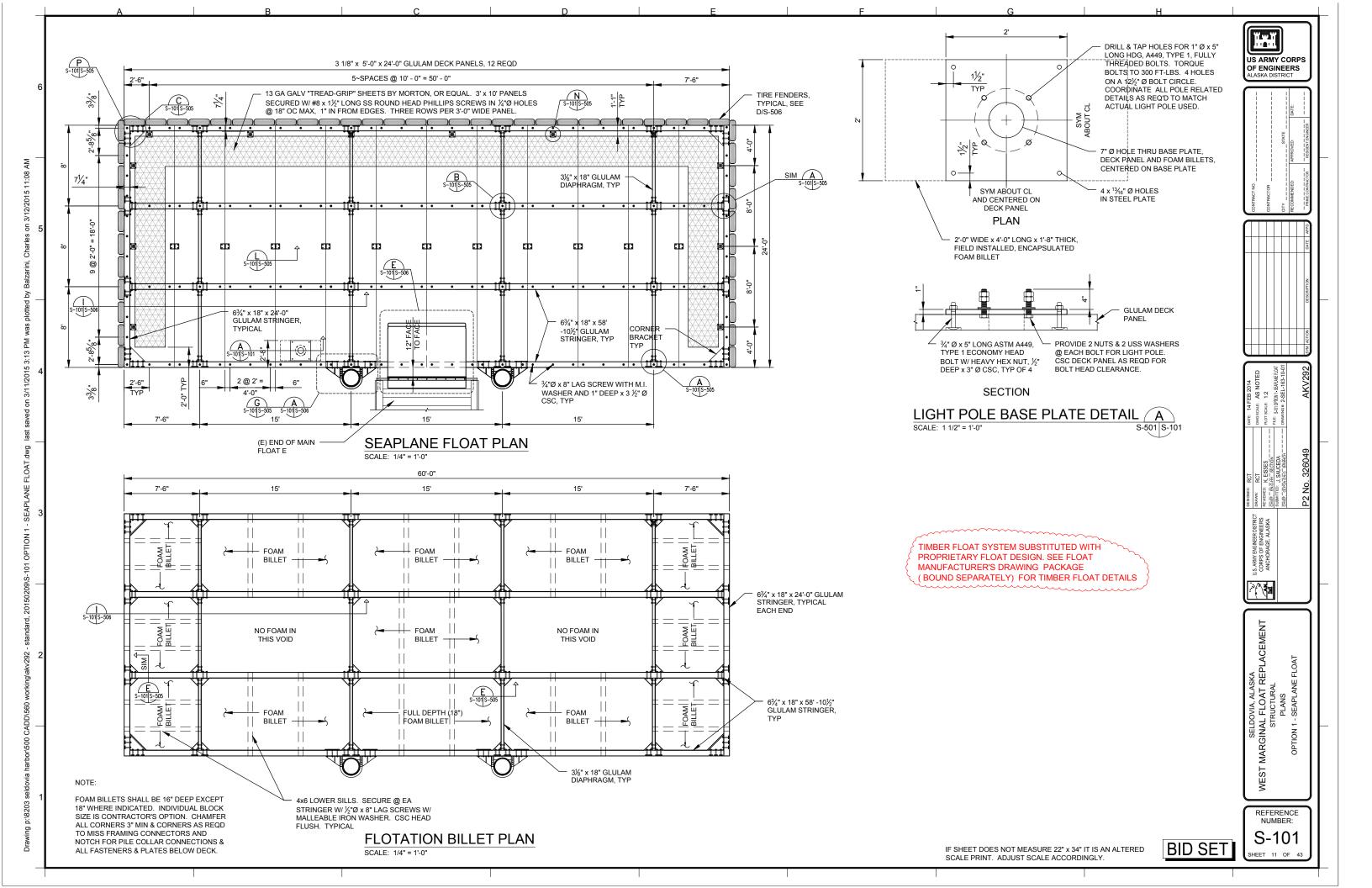
PHOTO 27: TRANSFORMER AND ELECTRICAL PANEL TF.

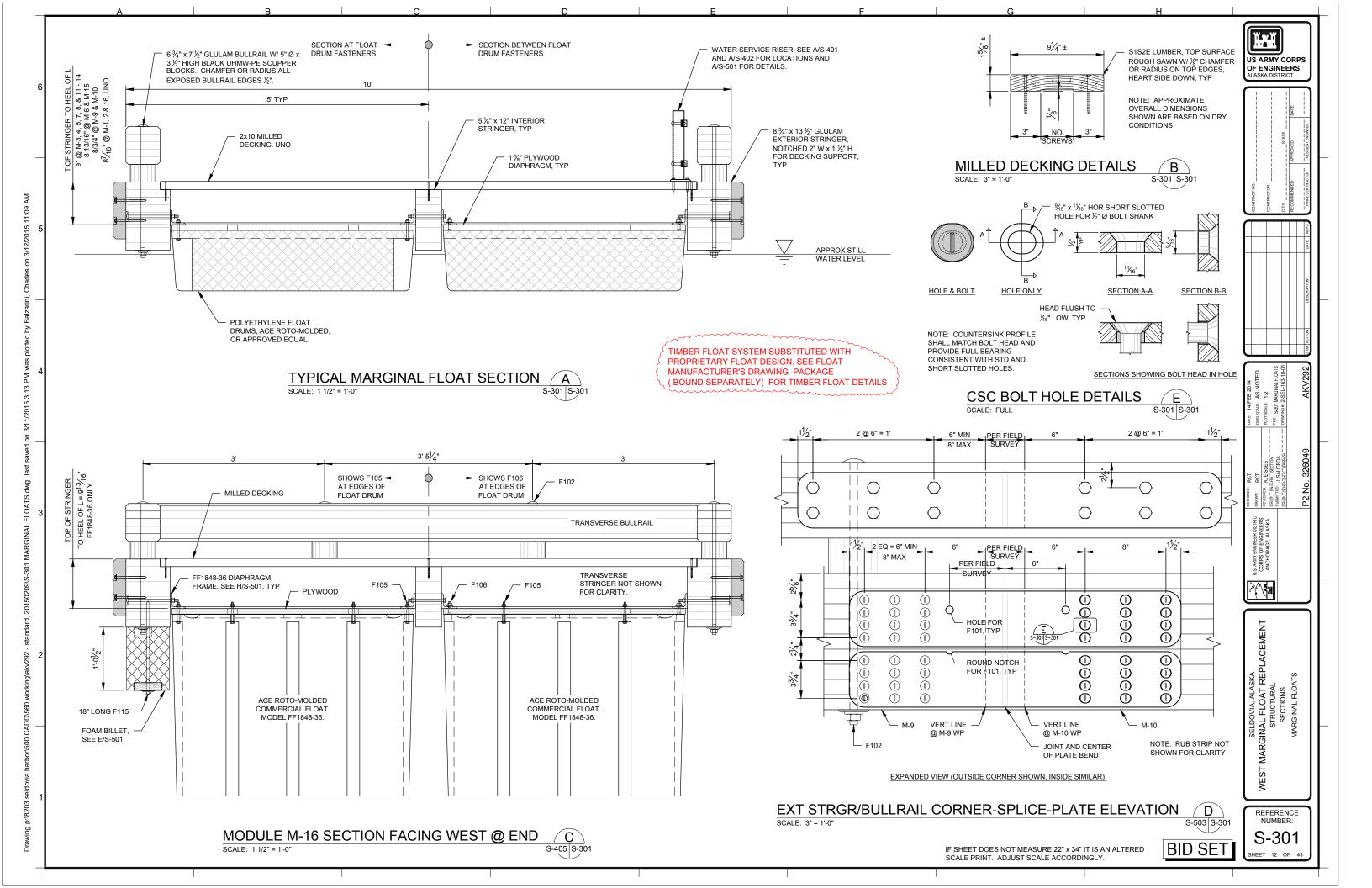
**BID SET** 

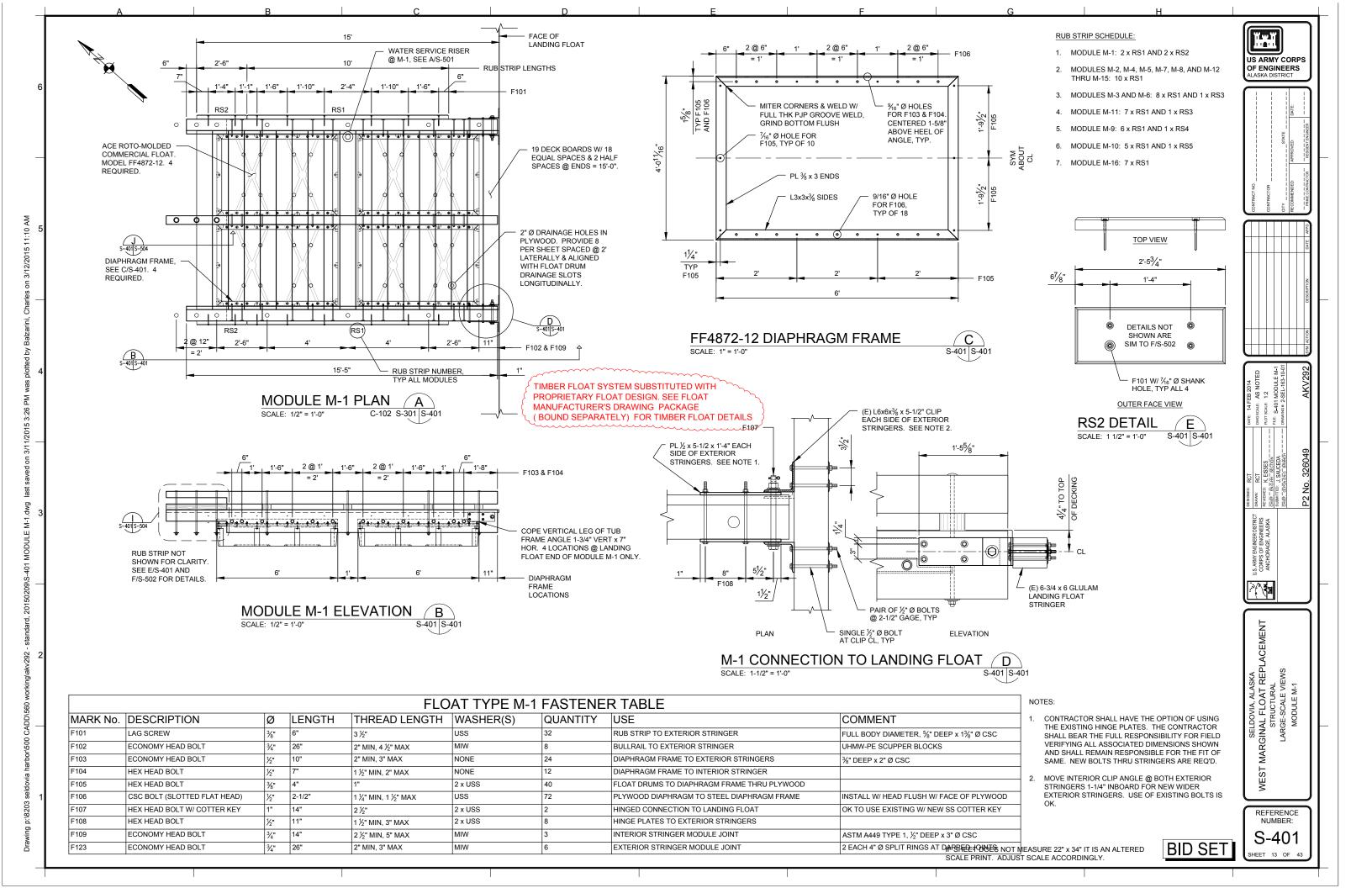
REFERENCE NUMBER: C-903 SHEET 10 OF 43

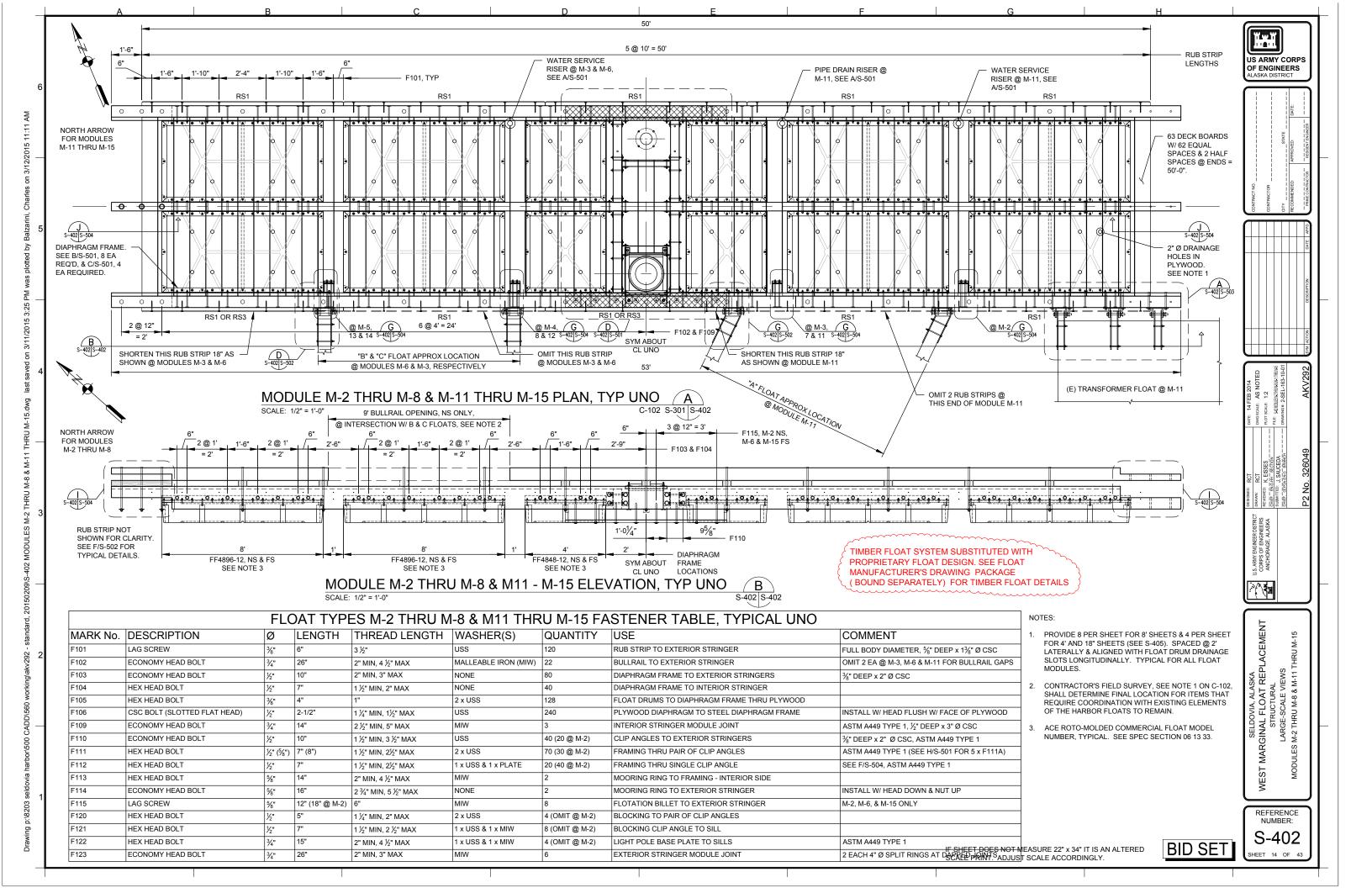
US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

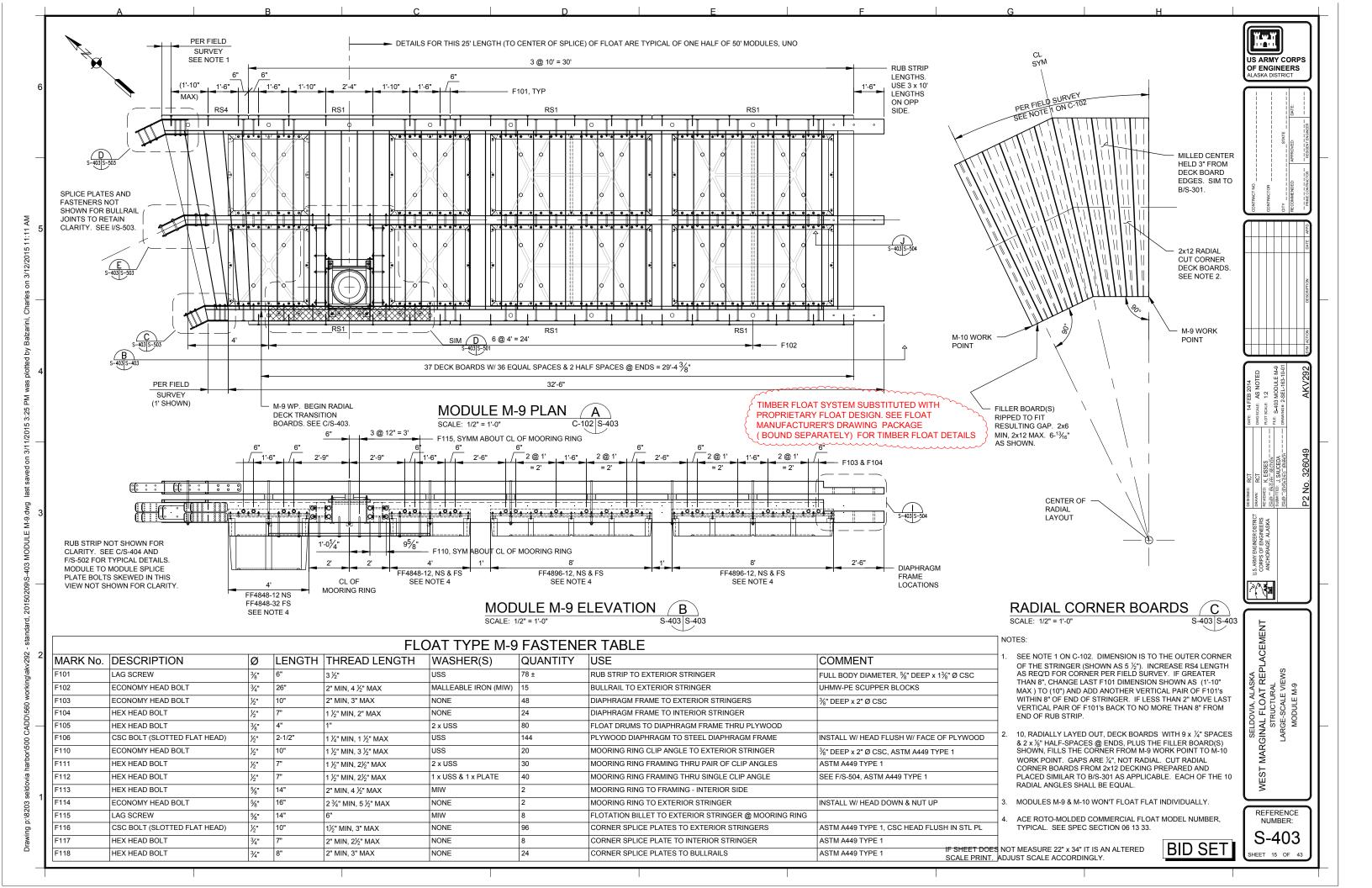
IF SHEET DOES NOT MEASURE 22" x 34" IT IS AN ALTERED SCALE PRINT. ADJUST SCALE ACCORDINGLY.

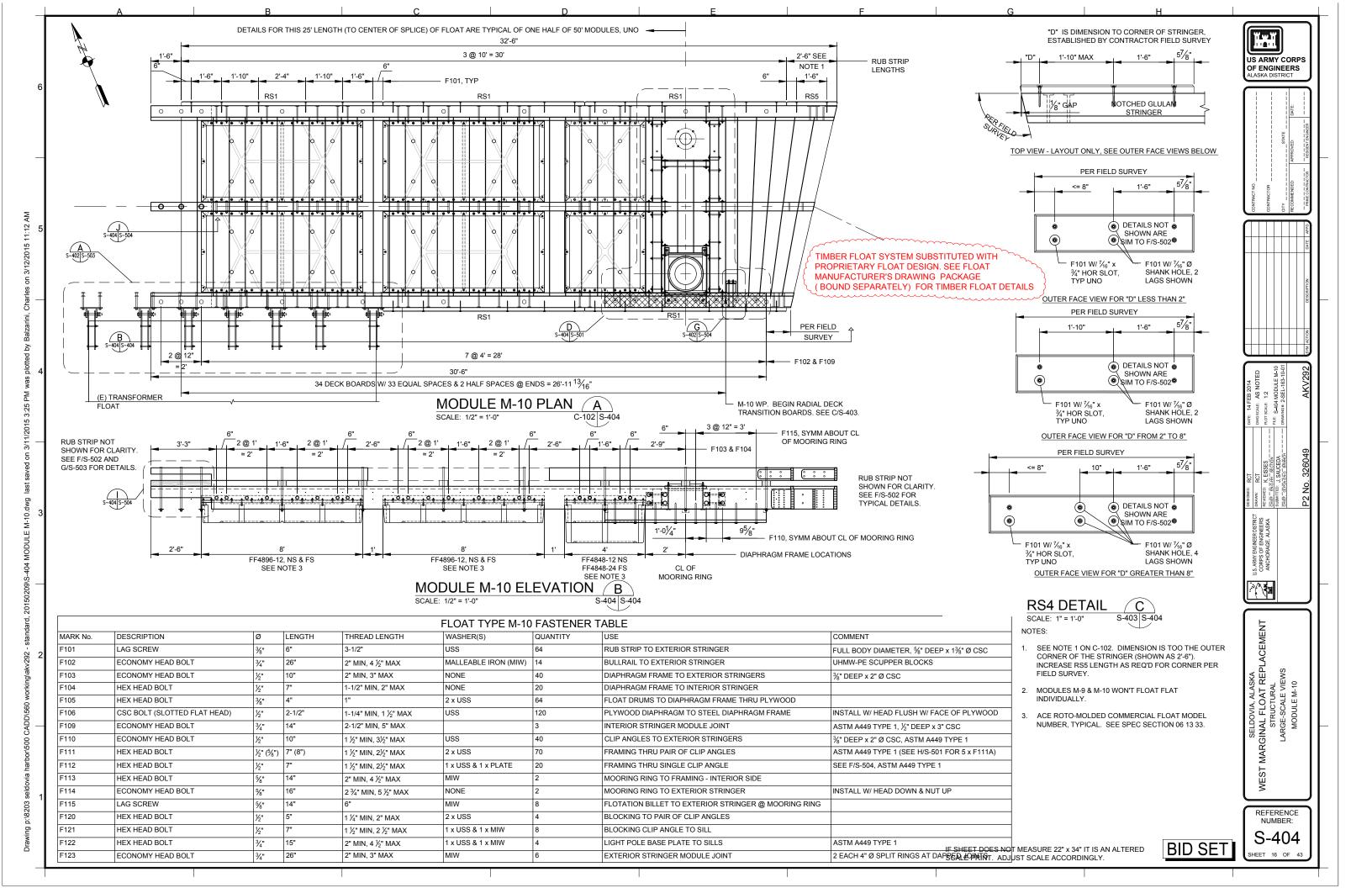


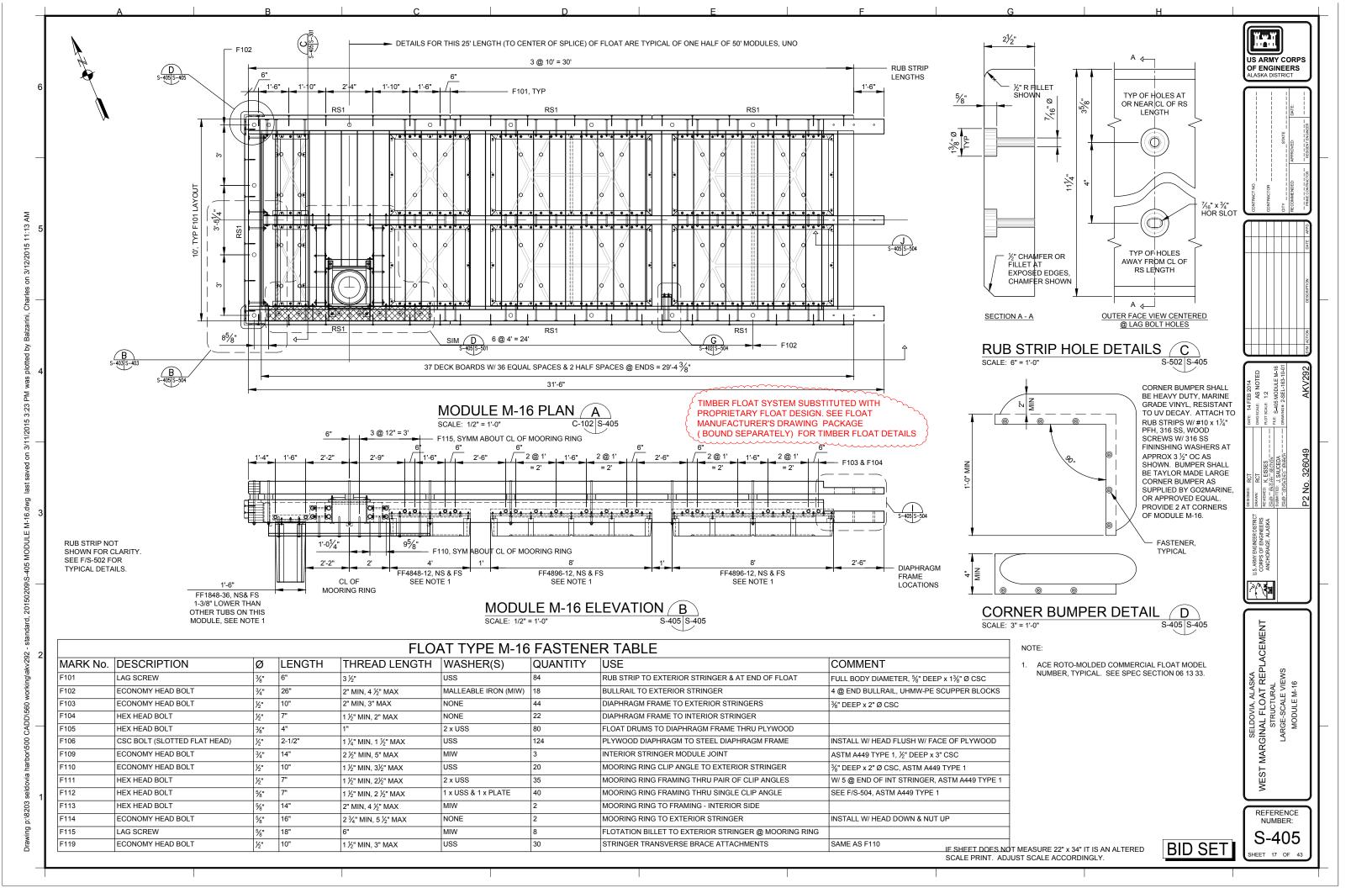


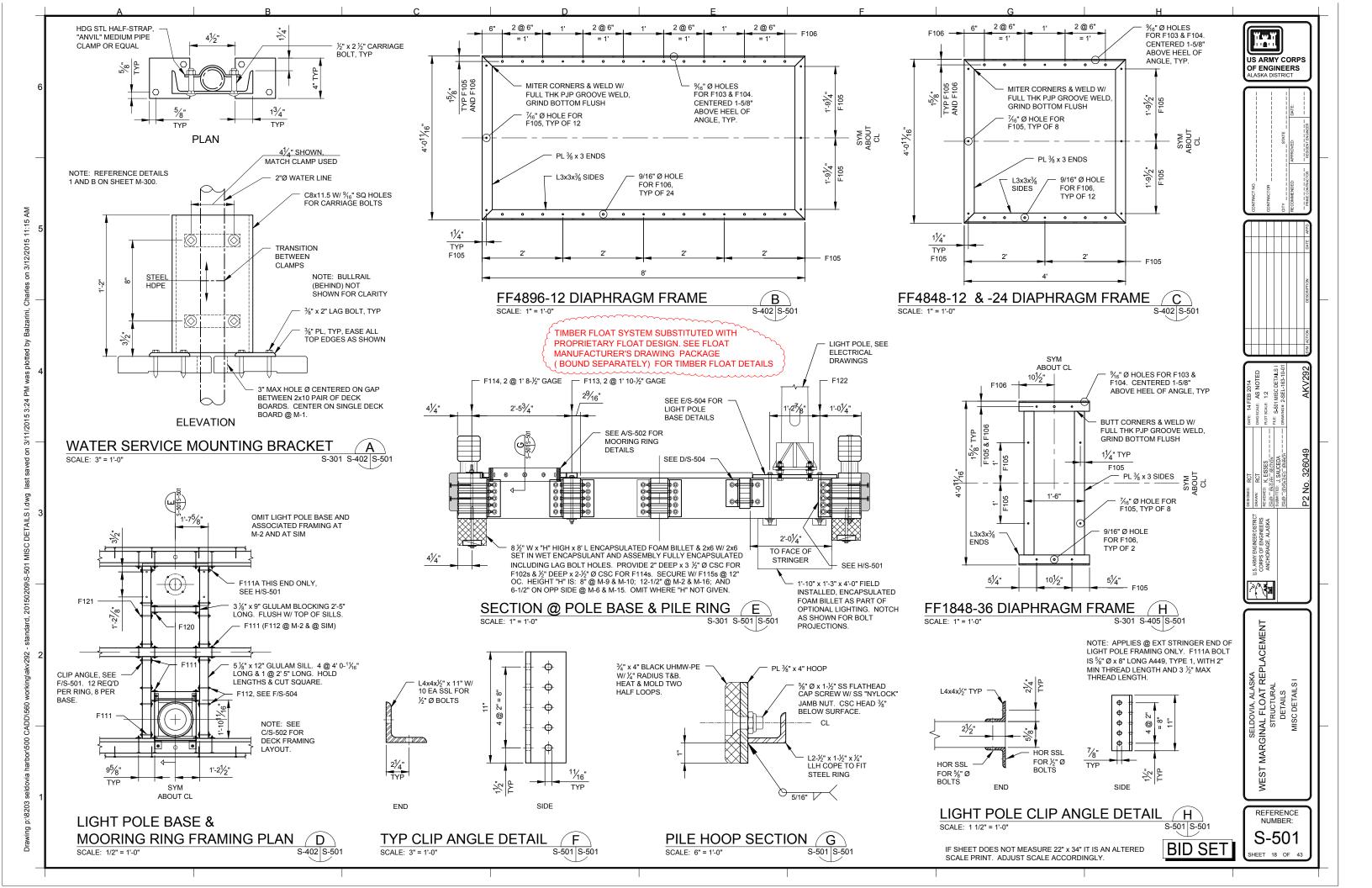


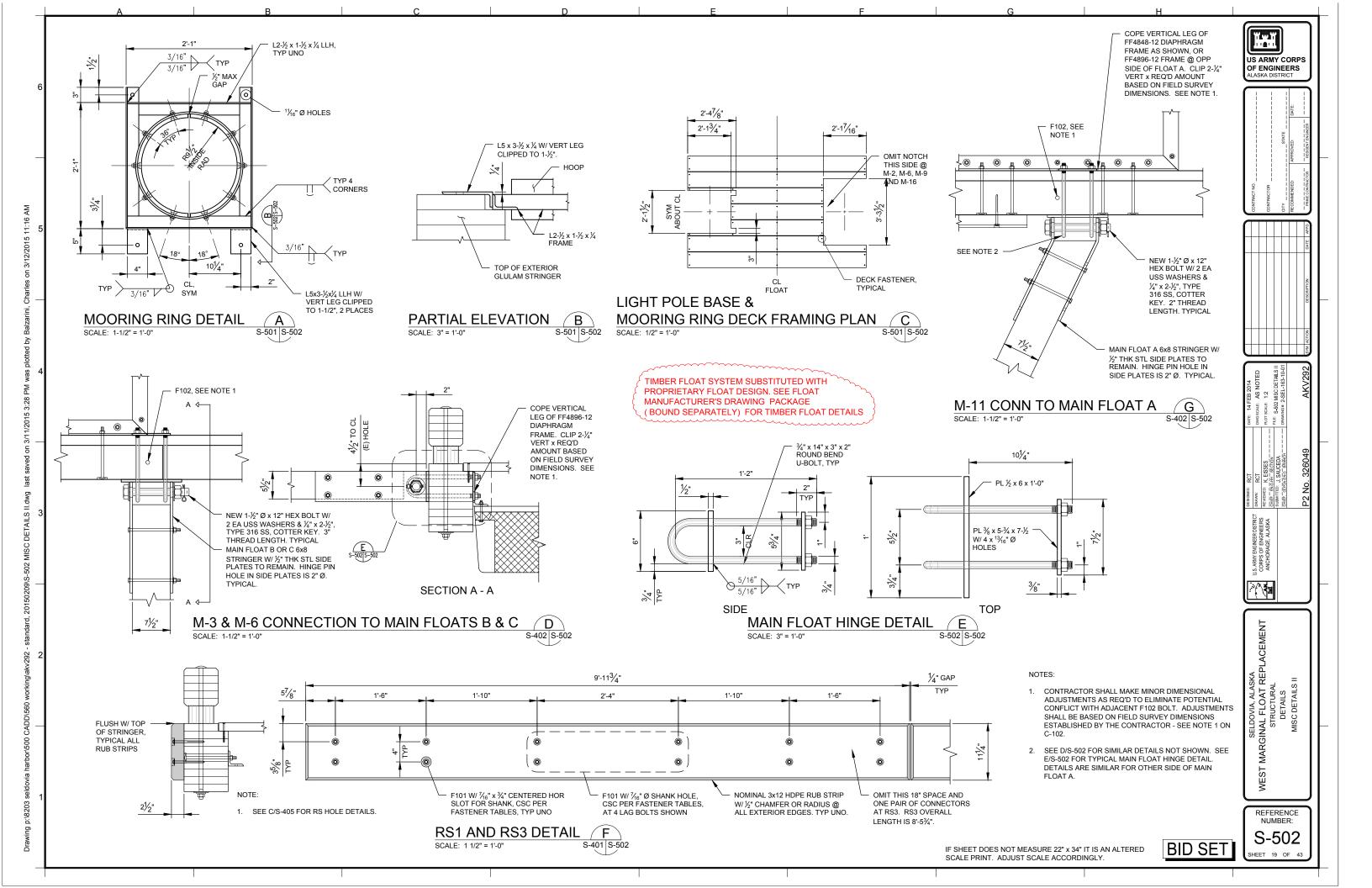


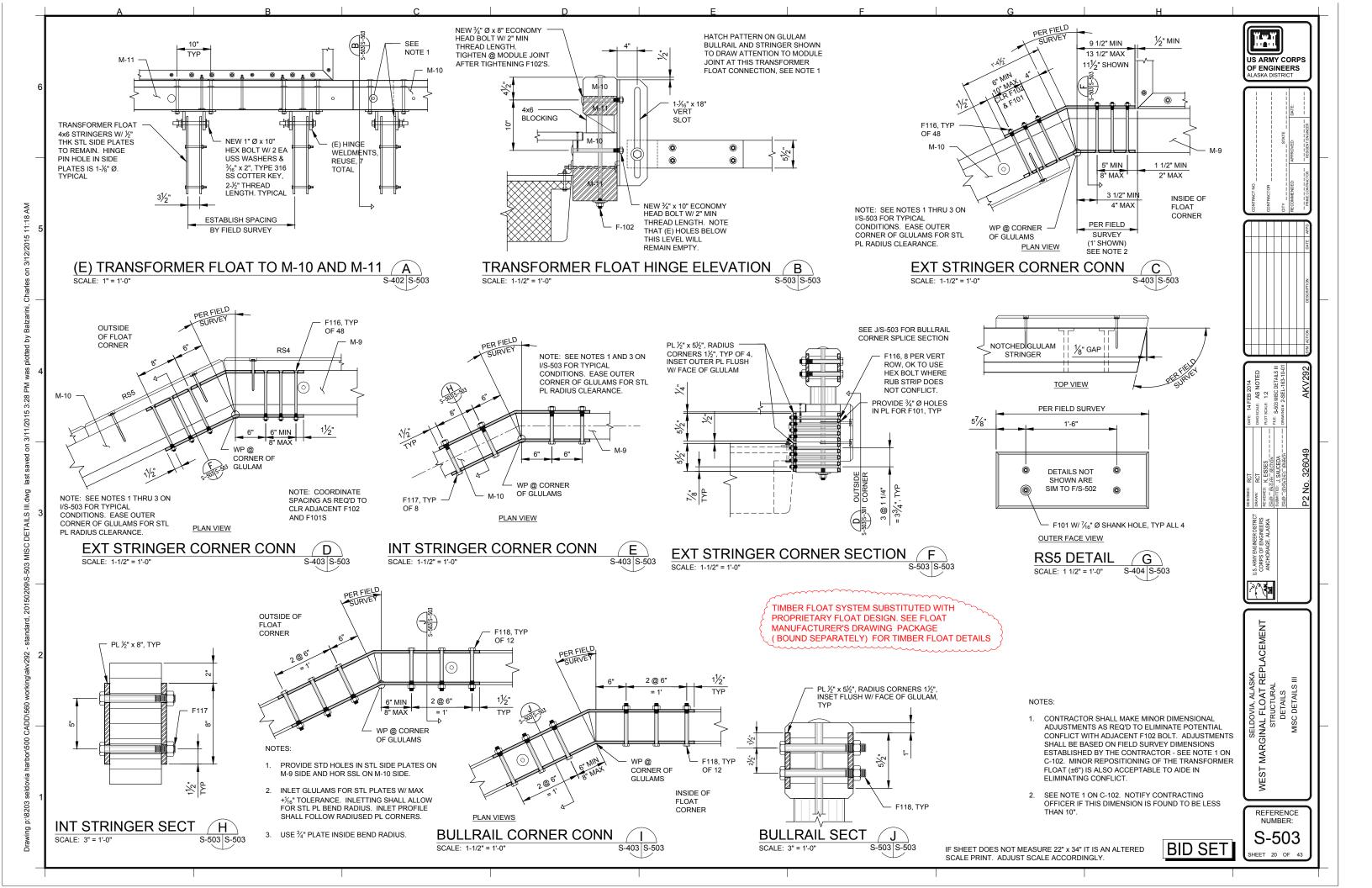


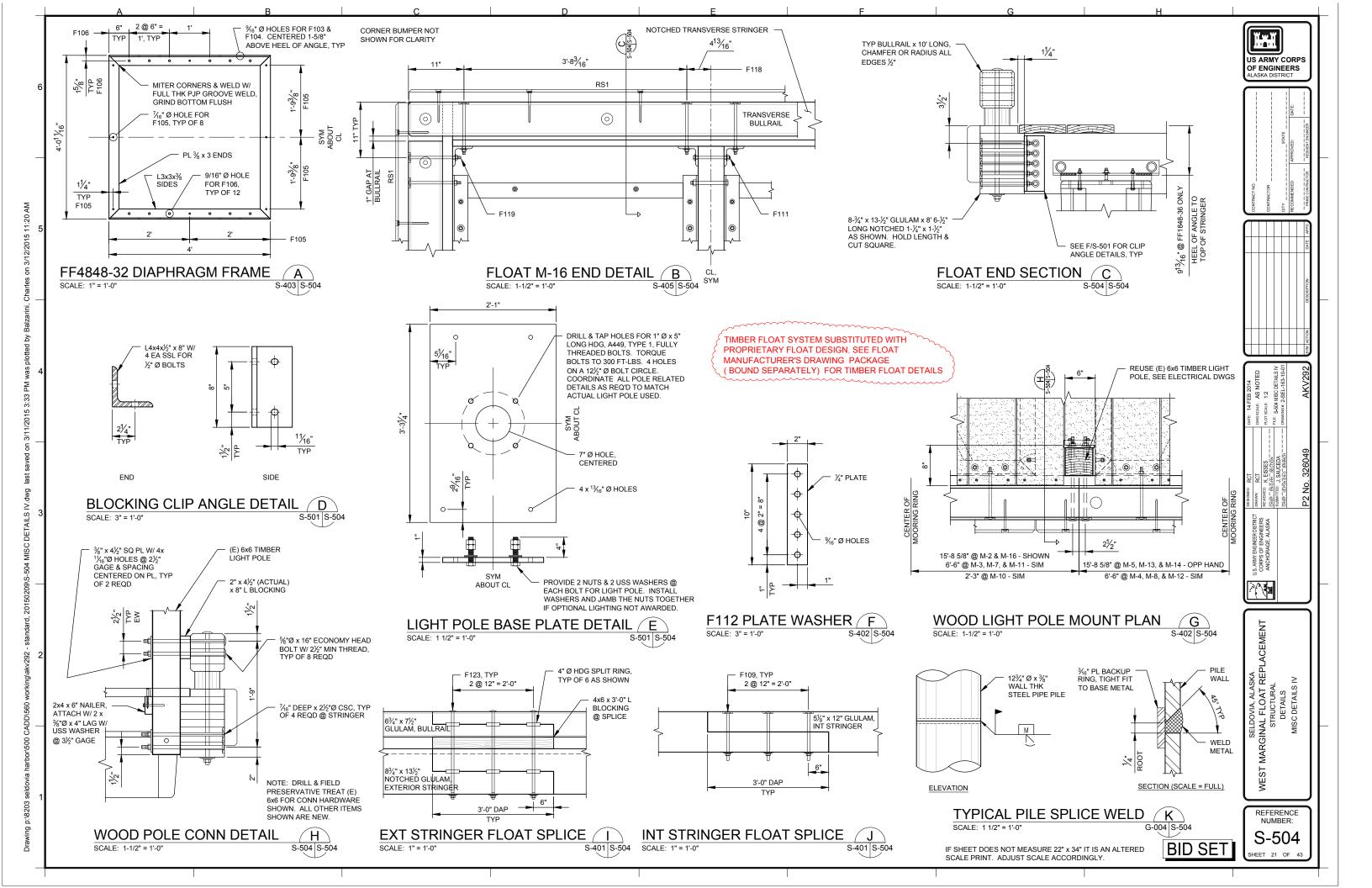


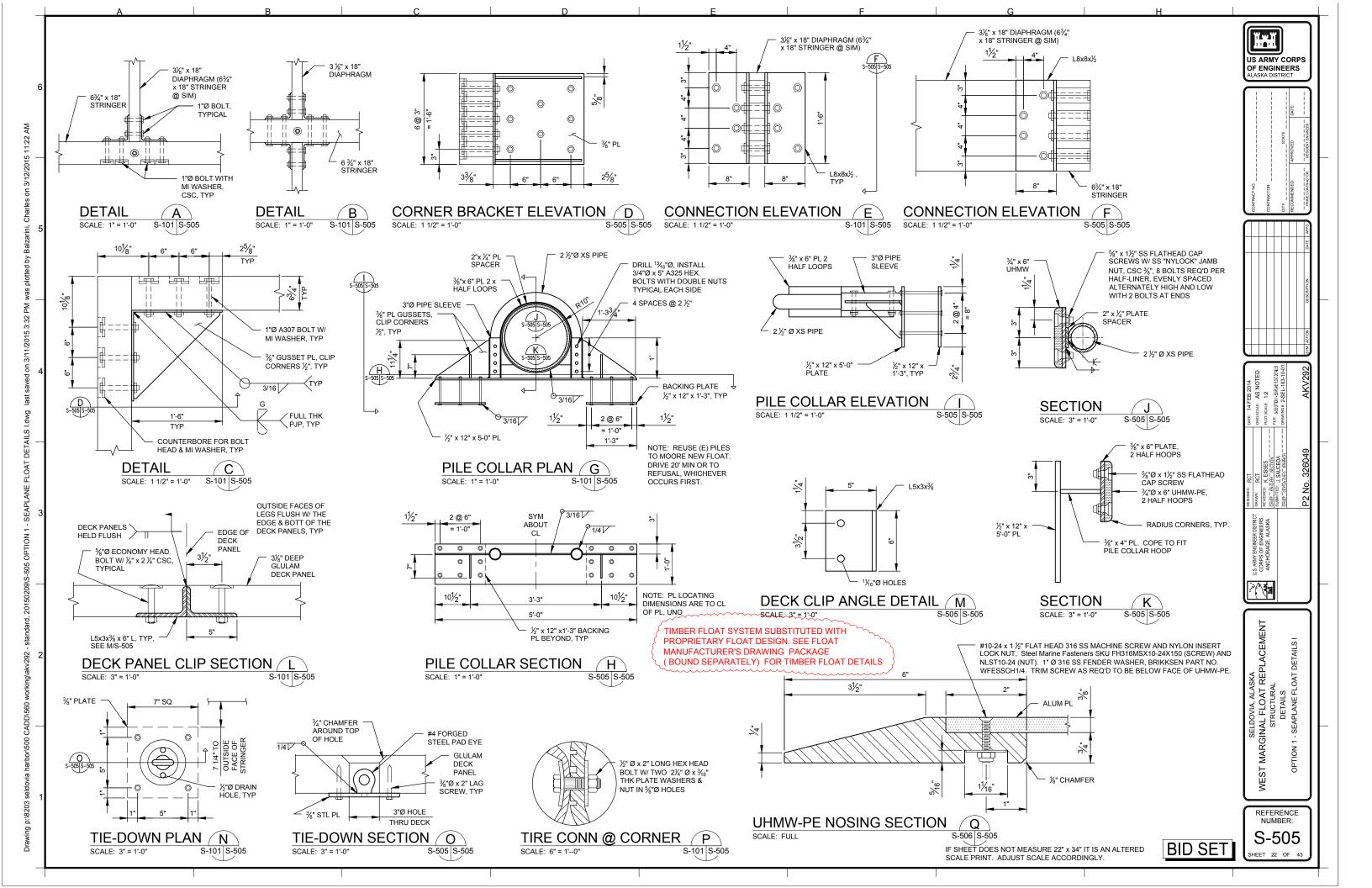


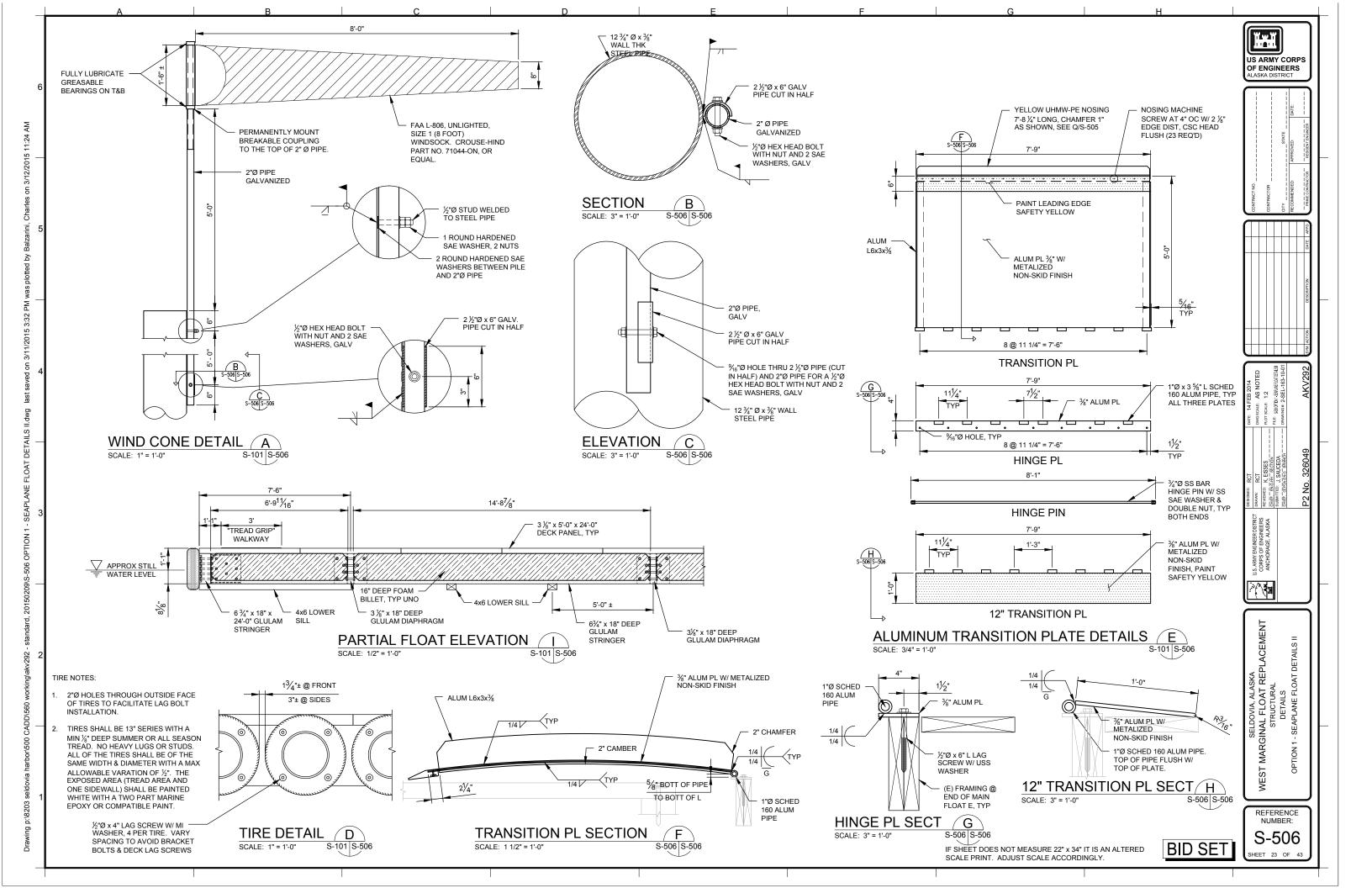












# MECHANICAL SCOPE OF WORK

# **DEMOLITION:**

- 1. THE CONTRACTOR SHALL CUT THE EXISTING 2" GALVANIZED AND  $\frac{3}{4}$ " HDPE PIPING MAINS ATTACHED TO THE EXISTING WEST MARGINAL FLOAT. COORDINATE THE PIPE MAIN CUTS WITH THE STRUCTURAL DEMOLITION. THE EXISTING PIPES AND RISERS SHALL REMAIN WITH THE EXISTING FLOAT
- 2. THE CONTRACTOR SHALL REMOVE THE EXISTING 2" GALVANIZED TEE AND ELBOW WATER SUPPLY ASSEMBLY UNDER THE RAMP AS INDICATED ON THIS SHEET.

# **NEW WORK:**

- 1. THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW 2" HDPE PIPING MAIN UNDER THE NEW WEST MARGINAL FLOAT AS INDICATED ON THE SITE PLAN. NEW 2" HDPE MAIN SHALL BE CONTINUOUS WITHOUT FITTINGS EXCEPT AT RISER LOCATIONS WHERE NEW 2" HDPE BRANCHES SERVE RISERS.
- 2. THE CONTRACTOR SHALL PROVIDE AND INSTALL SIX NEW 2" RISERS (FOUR WATER SUPPLY RISERS, A PIPE DRAIN RISER AND A RISER AT THE END OF THE LANDING FLOAT FOR WATER SUPPLY CONNECTION) AS INDICATED ON M-100 AND M-301. NEW RISERS SHALL BE PROVIDED WITH BUT NOT LIMITED TO TEES, PIPE TRANSITIONS, SHUT OFF VALVES, HOSE BIBBS AND HOSE VALVES, AS DETAILED ON DRAWINGS.
- 3. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW 2" HDPE TEE AND ELBOW ASSEMBLY TO REPLACE THE EXISTING 2" GALVANIZED TEE AND ELBOW ASSEMBLY UNDER THE BAMP FOR THE WATER SUPPLY. SEE PHOTO ON THIS SHEET FOR DETAILS
- 4. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW HOSE FLEXIBLE CONNECTIONS TO THE NEW 2" HDPE TEE TO CONNECT TO THE NEW 2" HDPE PIPE AT THE RAMP. SEE M-301 FOR NEW TEE PIPING DETAIL.
- 5. THE CONTRACTOR SHALL CONNECT THE NEW WATER SUPPLY ASSEMBLY TO THE EXISTING EAST MARGINAL FLOAT PIPING. THE EAST MARGINAL FLOAT PIPING SHALL BE INDEPENDENTLY OPERATIONAL DURING AND AFTER CONSTRUCTION OF THE NEW WEST MARGINAL FLOAT.
- THE CONTRACTOR SHALL PROVIDE A NEW 2" HDPE DRAIN RISER AT FLOAT A. SEE SHEET M-300 FOR DETAILS.

# GENERAL NOTES,

- 1. THE WATER IN THE NEW PLUMBING SYSTEM IS CONNECTED TO THE CITY FIRE HYDRANT SYSTEM. THE WATER AT THE HARBOR DOWNSTREAM OF THE BACKFLOW PREVENTER IS TO BE CONSIDERED AND LABELED NON-POTABLE.
- 2. THE NEW PLUMBING SYSTEM SHALL BE FOR SUMMER USE ONLY. IN THE FALL, THE NEW MAIN SHUT OFF VALVE AT THE RAMP SHALL BE SHUT. WATER REMAINING IN THE NEW PIPES SHALL BE DRAINED.
- 3. NEW PIPE SYSTEM DRAINING SHALL BE ACCOMPLISHED BY USING THE NEW 2" HDPE DRAIN RISER LOCATED ADJACENT TO FLOAT A RISER. SEE SHEET M-300.
- 4. A NEW ELECTRIC PORTABLE PUMP WITH 2" DIA HOSE SHALL BE USED TO DRAIN THE WATER IN THE PIPE. WATER OUTLET SHALL DISCHARGE TO THE SEA.
- 5. PROVIDE PROVISIONS FOR PIPE MOVEMENT AT ALL FLOAT JOINTS, SEE STRUCTURAL DRAWINGS FOR FLOAT JOINTS ON THE WEST MARGINAL FLOAT,
- 6. PROVIDE HYDROSTATIC TEST IN ACCORDANCE WITH THE SPECIFICATIONS.

# EQUIPMENT SCHEDULE

# HDPE PIPE AND PIPE FITTINGS:

2" HIGH DENSITY POLYETHYLENE PIPE, SDR 11, 200 PSI RATED, LISTED FOR PE 4710 MATERIALS. JOINTS SHALL BE FUSED AS RECOMMENDED BY THE HDPE PIPE MANUFACTURER. PROVIDE DRISCOPLEX OR APPROVED EQUAL.

# SHUT OFF VALVE:

2" BRASS BALL VALVE, LARGE PORT, CADMIUM PLATED VINYL INSULATED QUARTER TURN HANDLE, 500 PSI RATED, UL LISTED. PROVIDE POTTER-ROEMER INC 4400 SERIES OR APPROVED EQUAL.

# DRAIN SHUT OFF VALVE:

2" FULL PORT BRONZE BALL VALVE, PLASTISOL COATED QUARTER TURN

PROVIDE NIBCO T-585-70 OR APPROVED EQUAL.

# **HOSE VALVE:**

13" CAST BRASS ANGLE VALVE, DOUBLE FEMALE NPT CONNECTOR, WITH RED HAND WHEEL OPERATOR, 300 PSI RATED FOR USE WITH FIRE HOSE. PROVIDE POTTER-ROEMER INC 4060 SERIES OR APPROVED EQUAL.

3" VALVE, FIP TO HOSE, 125 PSI RATED, NSF/ANSI 61-9 LISTED. PROVIDE NIBCO QT55X OR APPROVED EQUAL.

# FREEZE PROTECTION VALVE:

3/4" AUTOMATIC BLEEDER/DRAIN VALVE PROVIDE OGONTZ TYPE F VALVE OR APPROVED EQUAL.

# TRANSITION PIPE:

VARIOUS SIZES SEE PIPING DETAILS FOR SIZES, 230 PSI RATED FOR USE WITH SDR 11 PE 4710 HDPE PIPE TO BRASS, BRONZE AND GALVANIZED PIPES OR FITTINGS, NSF 61 LISTED ELOFIT OR APPROVED EQUAL.

2" INDUSTRIAL MEDIUM GRADE HOSE FOR USE IN MARINE ENVIRONMENT. SYNTHETIC RUBBER TUBE WITH SYNTHETIC RUBBER COVER WITH INTERNAL WIRE HELIX REINFORCEMENT. 7" MINIMUM BENDING RADIUS, 125 PSI WORKING PRESSURE RATED, -25° F TEMPERATURE RATED. SUPPLY WITH HOSE MANUFACTURER COUPLERS FOR USE WITH HDPE AND/OR GALVANIZED PIPE WITH FACTORY SWAGED ENDS. PROVIDE GOODYEAR FLEXWING WATER S&D OR EQUAL

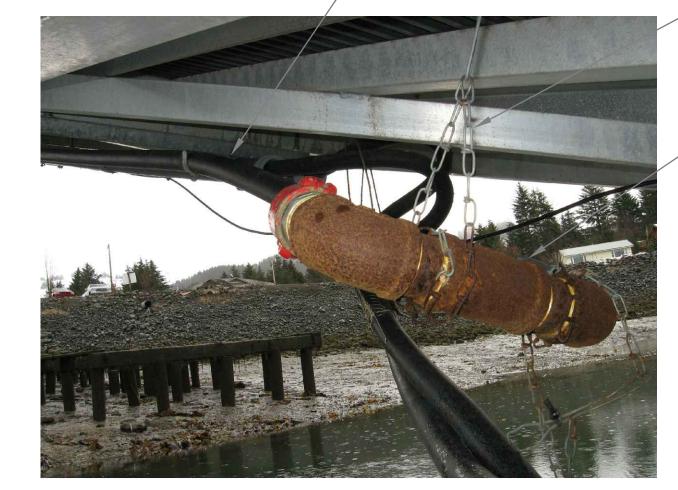
RATED 11.2 GPM AT 10 FT OF HEAD.  $\frac{1}{2}$  HP, 115 V, 1 PH, 60 HZ, 7000

SELF PRIMING, 3" NPT INLET AND OUTLET, CAST IRON HOUSING. FURNISH WITH 10 FT OF RUBBER HOSE FOR INLET CONNECTION AND 5 FT RUBBER HOSE FOR OUTLET CONNECTION.

PROVIDE DAYTON MODEL 4CB57 OR APPROVED EQUAL.

PLUMBING MATERIALS DELIVERED TO CITY OF SELDOVIA BUT WERE NOT INSTALLED AS A PART OF THIS PROJECT.

EXISTING 2" HDPE SUPPLY PIPE UNDER THE RAMP TO REMAIN.



- REMOVE EXISTING PIPE SUPPORT, PROVIDE NEW PIPE SUPPORT TO ACCOMMODATE NEW 2" HDPE TEE. SEE DETAIL M-300

EXISTING 2" GALVANIZED TEE UNDER THE RAMP TO BE REMOVED. PROVIDE NEW 2" HDPE TEE TO REPLACE EXISTING REMOVED 2" GALVANIZED TEE. NEW 2" HDPE TEE MARKS THE START OF THE NEW PIPING SYSTEM. SEE DETAIL ON



# EXISTING WATER SUPPLY ASSEMBLY NOT TO SCALE

-EXISTING 2" GALVANIZED RISER. PROVIDE NEW 2" HDPE RISER, TYPICAL OF 4 RISERS. SEE SITE PLAN FOR

RISER LOCATIONS



EXISTING 2" GALVANIZED PIPE MAIN AND PIPE BRANCH. PROVIDE NEW 2" HDPE PIPE MAIN AND BRANCH, TYPICAL OF 4 RISERS. SEE M-100 SITE PLAN FOR RISER LOCATIONS



EXISTING 3/4" HDPE PIPE MAIN AND PIPE BRANCH. SEE M-100 SITE PLAN FOR RISER LOCATIONS



EXISTING PIPE MAIN, BRANCH AND RISER

NOT TO SCALE

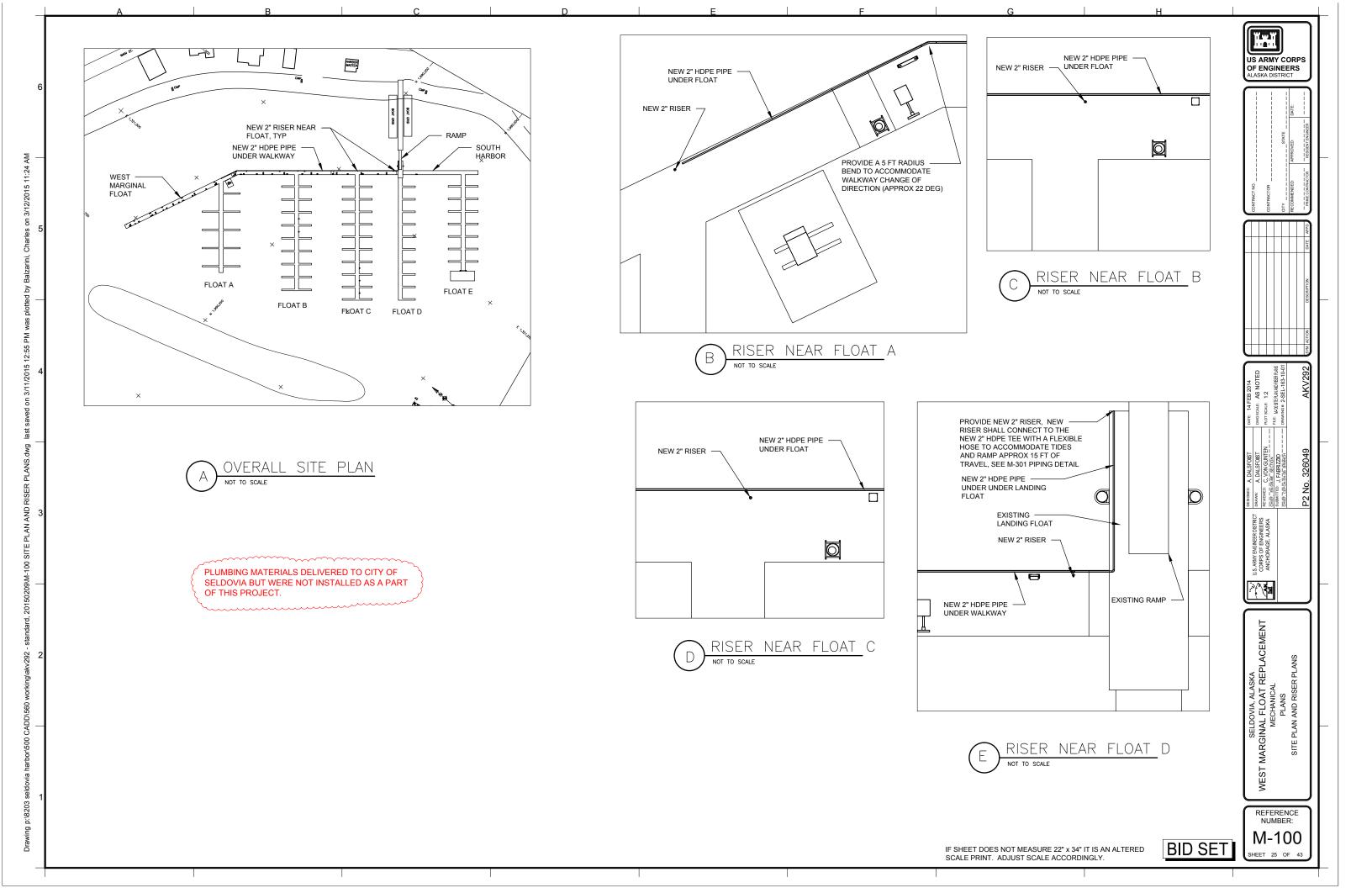
BID SET

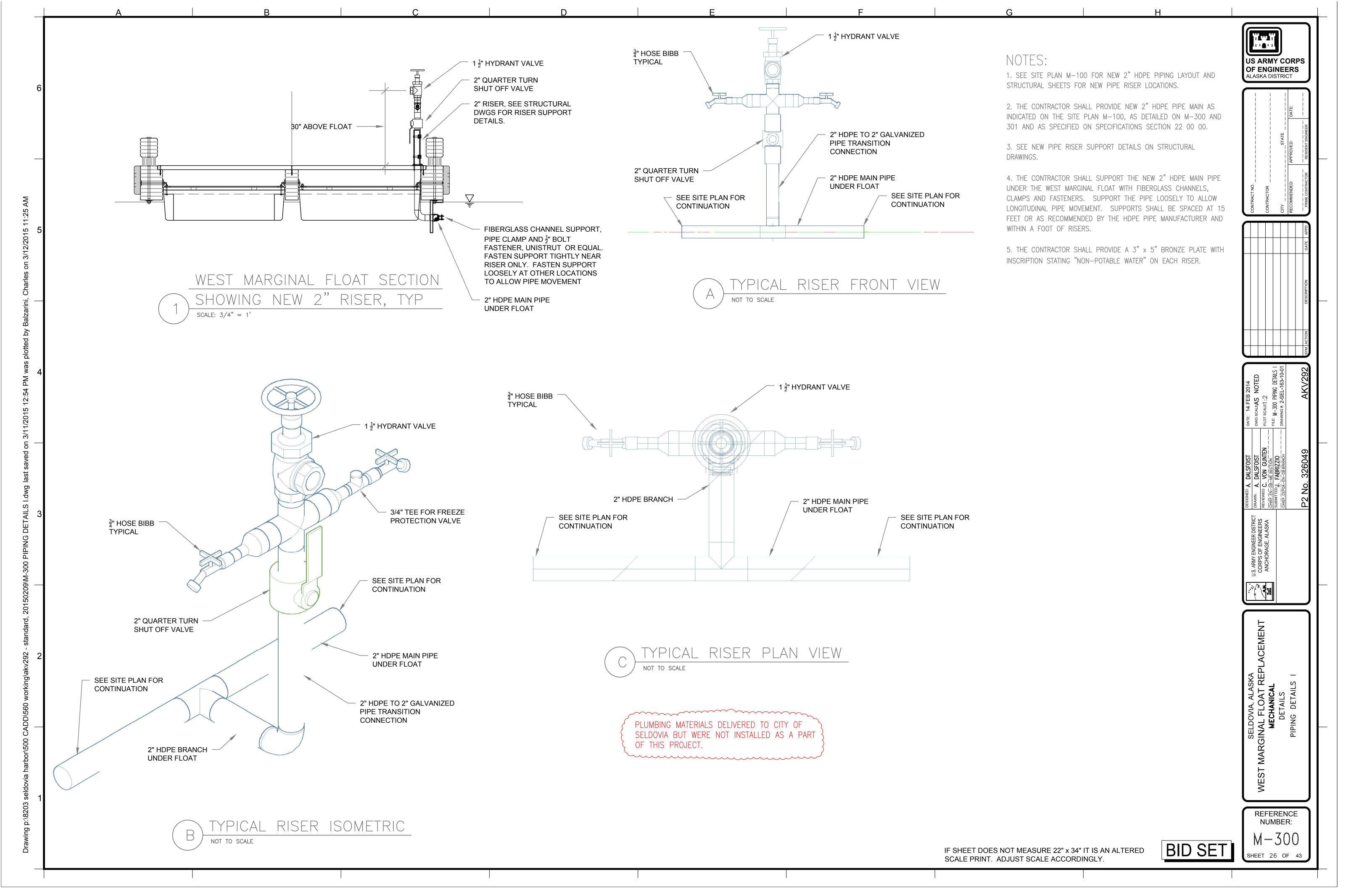
**REFERENCE** NUMBER: M - 001SHEET 24 OF 43

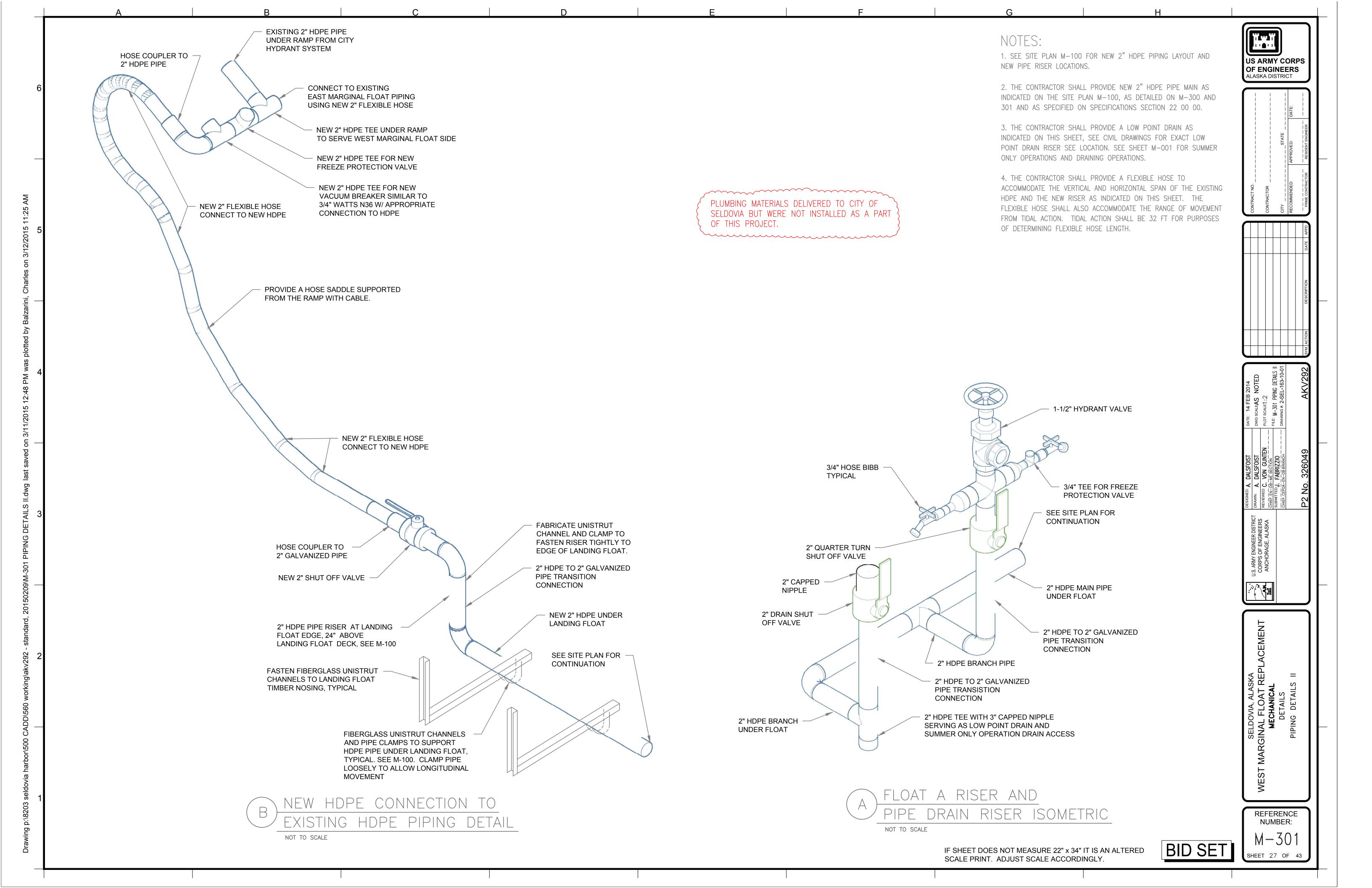
US ARMY CORPS

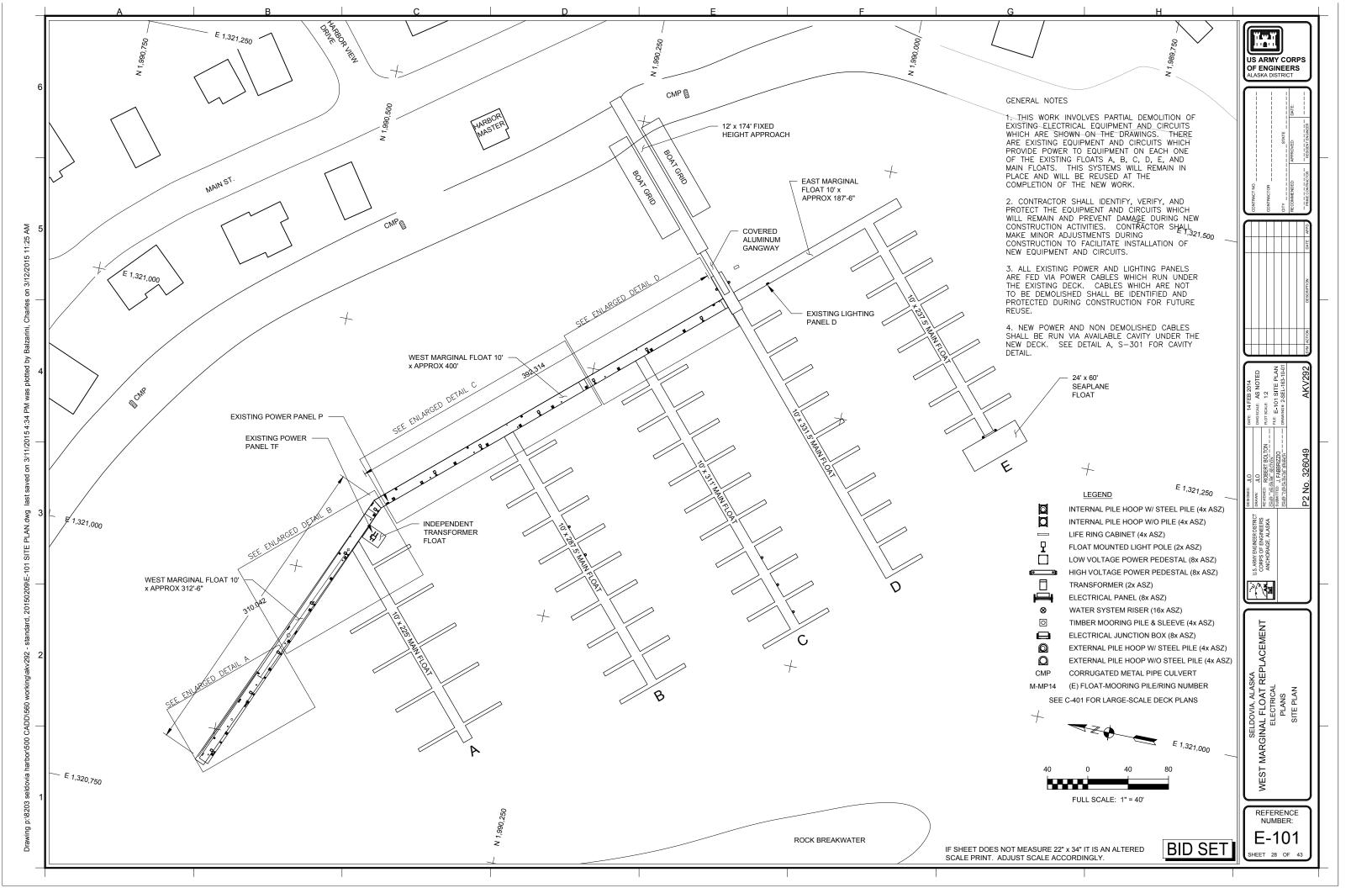
OF ENGINEERS ALASKA DISTRICT

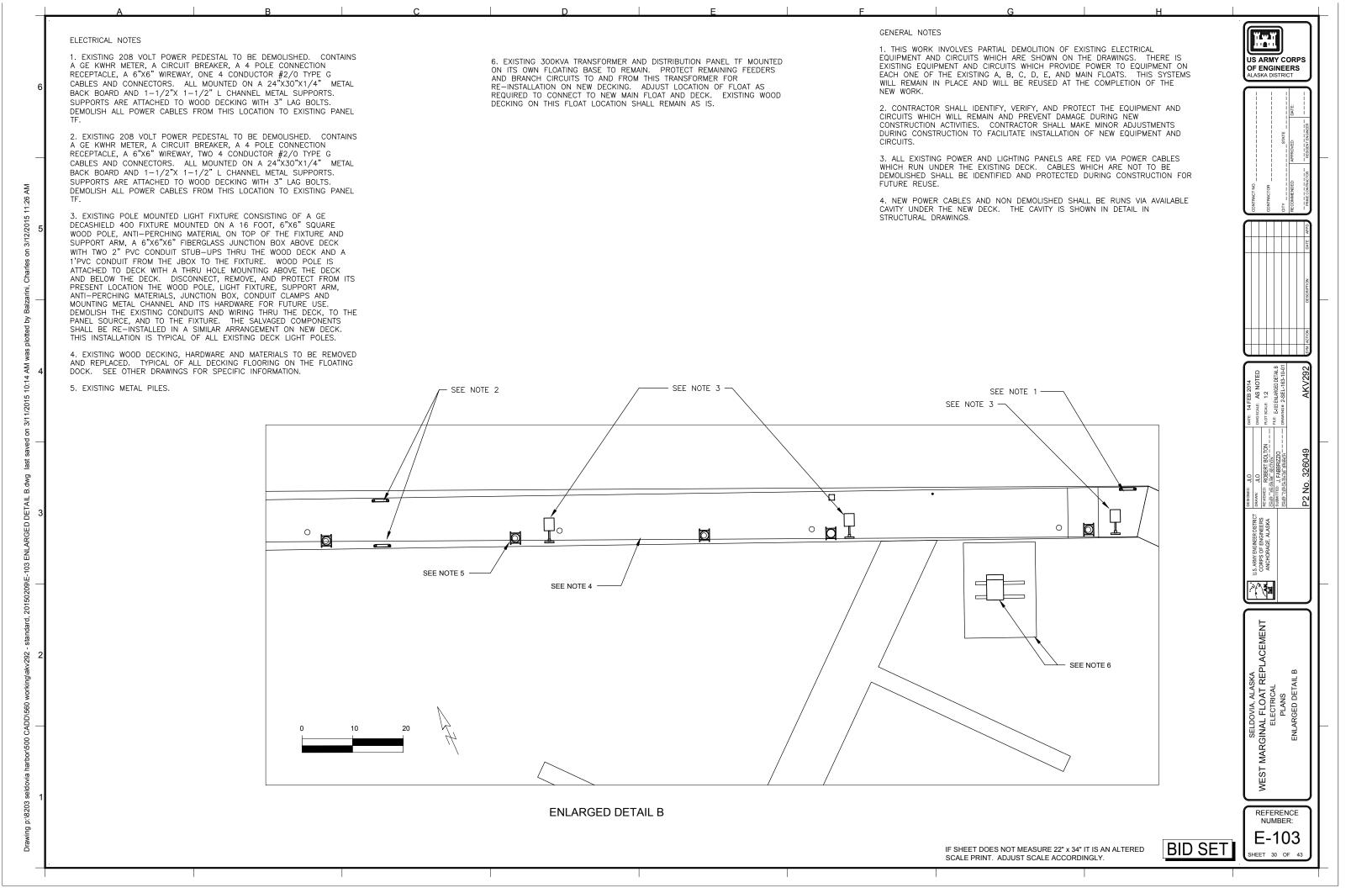
IF SHEET DOES NOT MEASURE 22" x 34" IT IS AN ALTERED SCALE PRINT. ADJUST SCALE ACCORDINGLY.

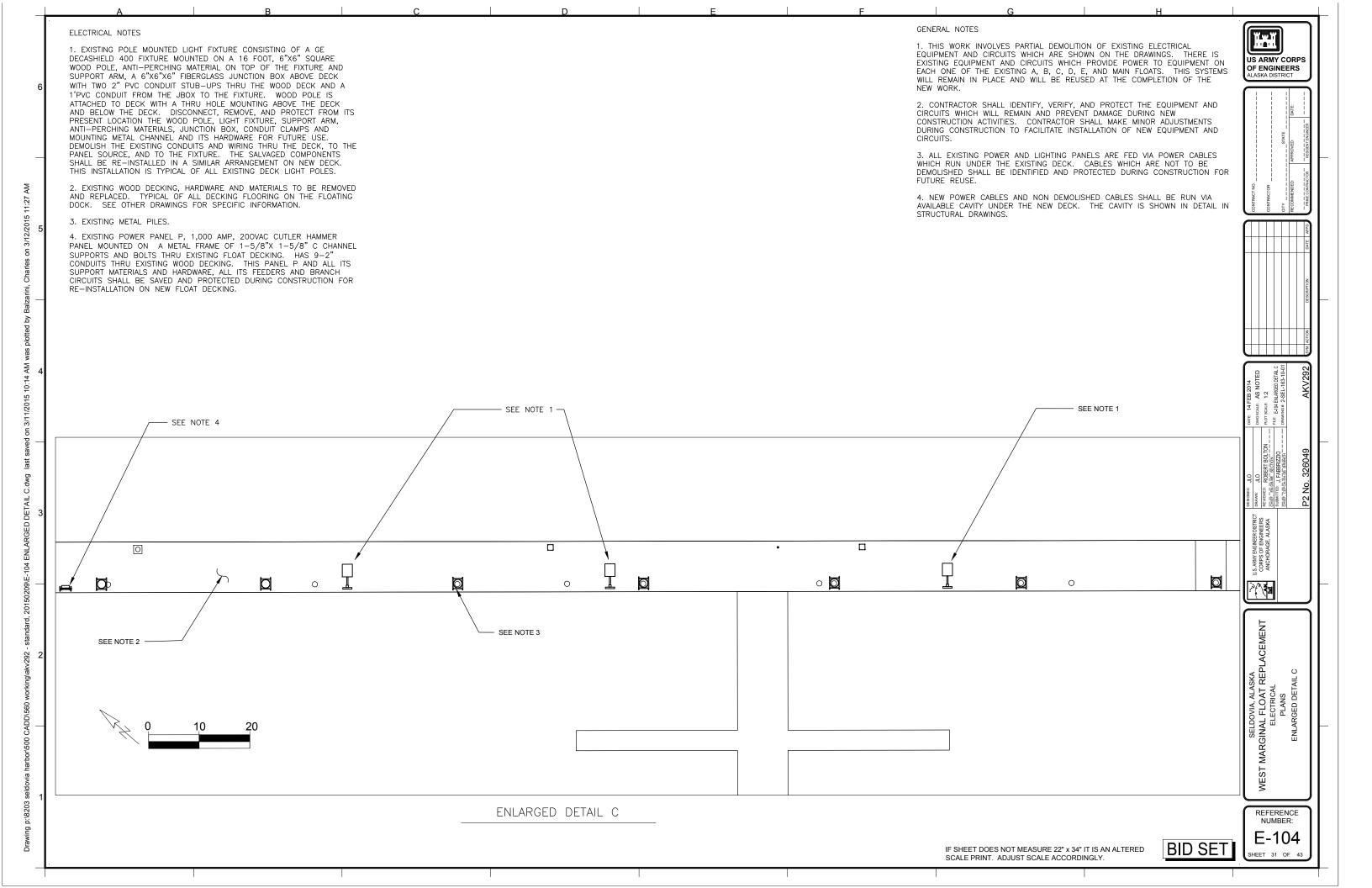


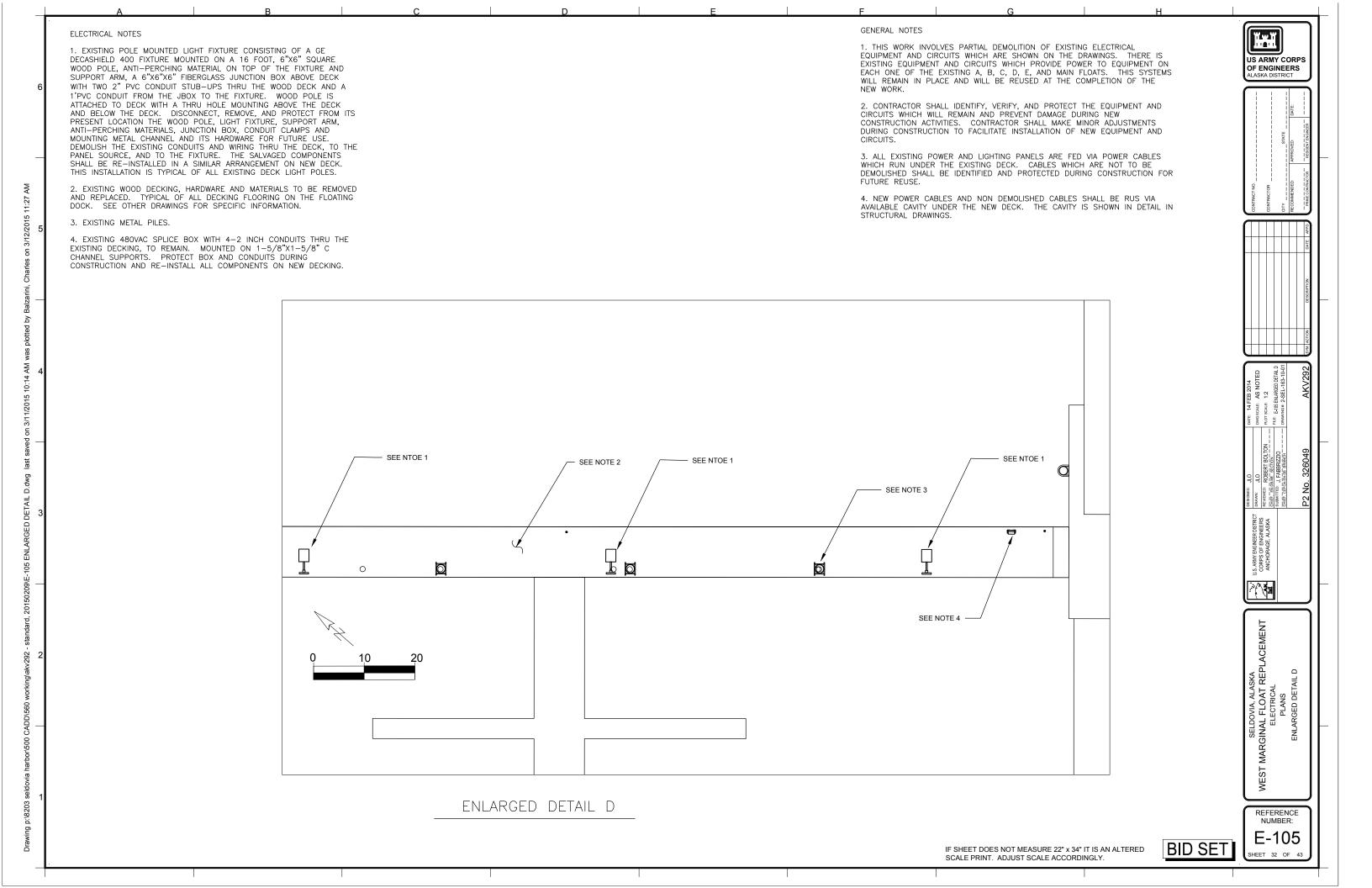












# ELECTRICAL NOTES

. NEW 100 AMP POWER PEDESTAL. PROVIDE A MOUNTING BASE FOR MOUNTING ON WOOD DOCK. MOUNT EACH PEDESTAL AT CORNER WITH 1-1/2" LAG SCREWS. PROVIDE ALL STAINLESS SCREWS AND HARDWARE. RECEPTACLES SHALL BE MOUNTED AT A DOWN ANGLE OF 35 DEGREES FROM VERTICAL . PROVIDE A HOSE/CABLE BRACKET CAPABLE OF HOLDING A 50 FEET OF POWER CONDUCTOR CABLE. SEE SHEET E-114 AND SPECIFICATION FOR ADDITIONAL REQUIREMENTS

2. PROVIDE NEW POWER CABLE FROM PANEL TF, ROUTED UNDER THE NEW DECK. MAKE CONNECTIONS TO THE NEW PEDESTAL LOOP FEED BUSS BAR. SECURE THE FEEDER CABLE IMMEDIATELY UNDER THE PEDESTAL TO THE UNDERSIDE OF THE NEW WOOD DECK TO PREVENT STRAIN ON THE BUSS BAR. SEE E-115.

3. NEW FLOODLIGHT POLE LOCATION CONSISTING OF A 25 FOOT, ROUND TAPERED POLE, A HORIZONTAL BRACKET FOR 2 FIXTURES, 2-400 WATT METAL HALIDE FIXTURES TYPE A, AND ALL THE REQUIRED HARDWARE FOR A FUNCTIONAL INSTALLATION. PROVIDE A METALLIC LABEL ON POLE WITH POLE LOCATION NAME. PROVIDE GLARE SHIELD AND ANTI-PERCHING MATERIAL ON EACH FIXTURE. ONE FIXTURE SHALL FACE EAST. ONE FIXTURE SHALL FACE WEST. ALLL FIXTURES SHALL BE AIMED 48 DEGREES FROM HORIZONTAL LEVEL. PROVIDE ALL WIRING AND CONNECTIONS TO EACH FIXTURE AND TO THE NEW BRANCH CIRCUITS FROM NEW POWER PANEL Q. SEE SINGLE LINE DIAGRAM DETAIL FOR ADDITIONAL INFORMATION. TYPICAL ALL NEW 2 FIXTURE FLOODLIGHT POLE LOCATIONS. SEE SHEET

4. NEW MAIN FLOAT LIGHT FIXTURE LOCATION CONSISTING OF ALL THE PREVIOUSLY SALVAGED COMPONENTS. ASSEMBLE THE STRUCTURE AND INSTALL AT THIS NEW LOCATION. PROVIDE NEW BRANCH CIRCUIT AND ANY MISCELLANEOUS HARDWARE FOR PROPER AND COMPLETE INSTALLATION. TYPICAL ALL NEW LIGHT FIXTURE LOCATIONS. SEE E-115.

24' SQ TAPERED SWING **DOWN POLE** 

# **ELECTRICAL LEGEND**

EXISTING AND NEW WOOD POLE MOUNTED LIGHT FIXTURES

NEW POLE MOUNTED FLOODLIGHTS

PD

NEW DECK MOUNTED POWER PEDESTALS

> <

NEW LIGHTING PANEL

DUPLEX RECEPTACLE

# GENERAL NOTES

1. THIS WORK INVOLVES PARTIAL DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT AND CIRCUITS WHICH ARE SHOWN ON THE DRAWINGS. THERE IS EXISTING EQUIPMENT AND CIRCUITS WHICH PROVIDE POWER TO EQUIPMENT ON EACH ONE OF THE EXISTING A, B, C, D, E, AND MAIN FLOATS. THIS SYSTEMS WILL REMAIN IN PLACE AND WILL BE REUSED AT THE COMPLETION OF THE

2. CONTRACTOR SHALL IDENTIFY, VERIFY, AND PROTECT THE EQUIPMENT AND CIRCUITS WHICH WILL REMAIN AND PREVENT DAMAGE DURING NEW CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS DURING CONSTRUCTION TO FACILITATE INSTALLATION OF NEW EQUIPMENT AND

3. ALL EXISTING POWER AND LIGHTING PANELS ARE FED VIA POWER CABLES WHICH RUN UNDER THE EXISTING DECK. CABLES WHICH ARE NOT TO BE DEMOLISHED SHALL BE IDENTIFIED AND PROTECTED DURING CONSTRUCTION FOR

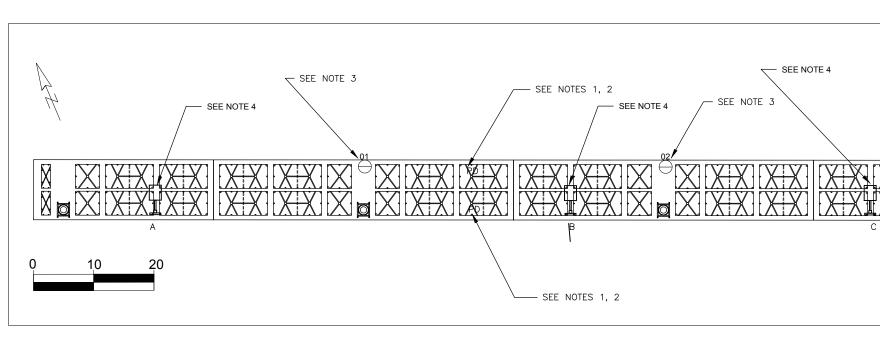
4. NEW POWER CABLES AND NON DEMOLISHED CABLES SHALL BE RUN VIA AVAILABLE CAVITY UNDER THE NEW DECK. THE CAVITY IS SHOWN IN DETAIL IN STRUCTURAL DRAWINGS.



ï...ï

US ARMY CORPS

OF ENGINEERS ALASKA DISTRICT



NEW WORK - DETAIL A

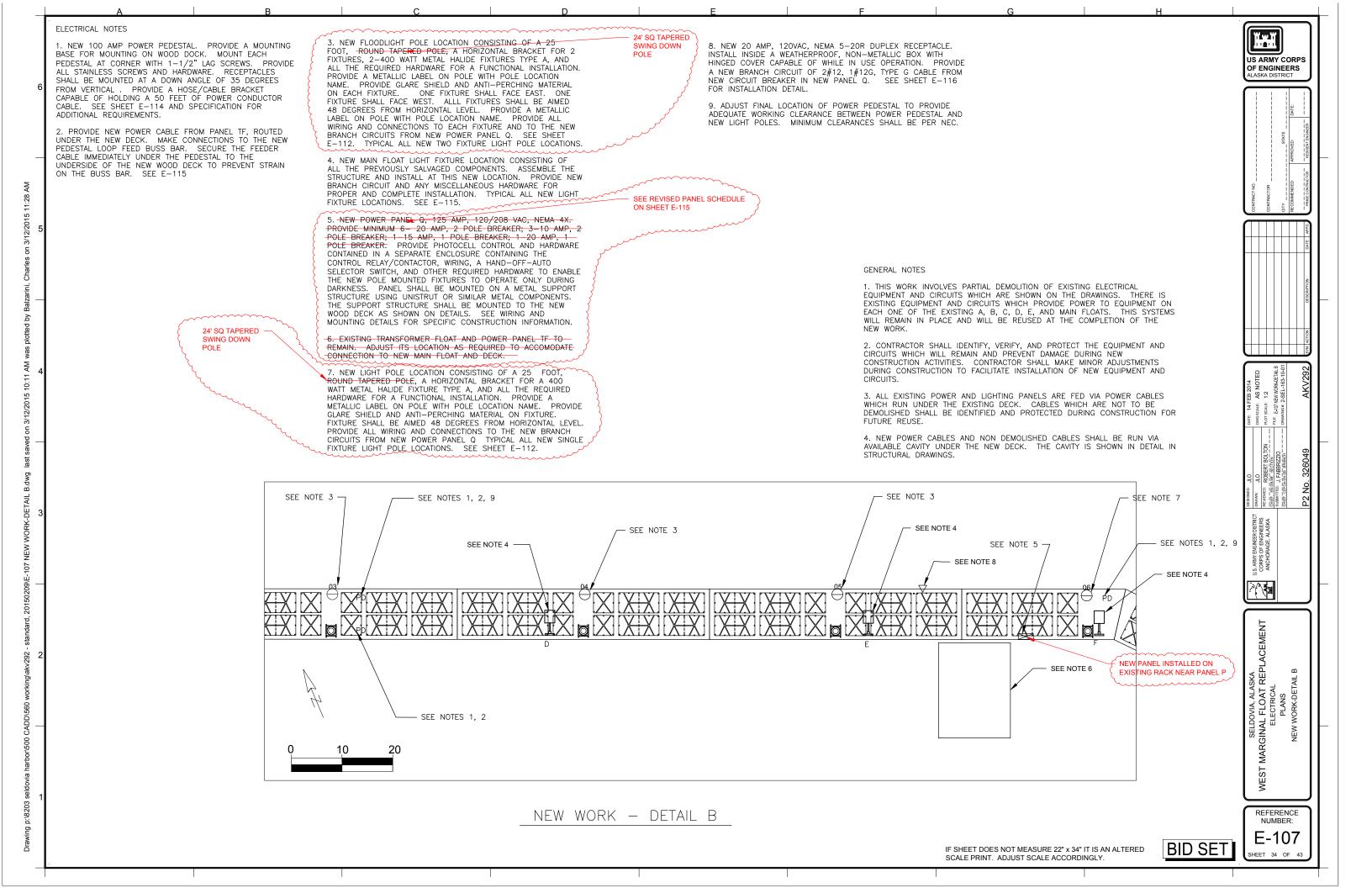
IF SHEET DOES NOT MEASURE 22" x 34" IT IS AN ALTERED SCALE PRINT. ADJUST SCALE ACCORDINGLY.

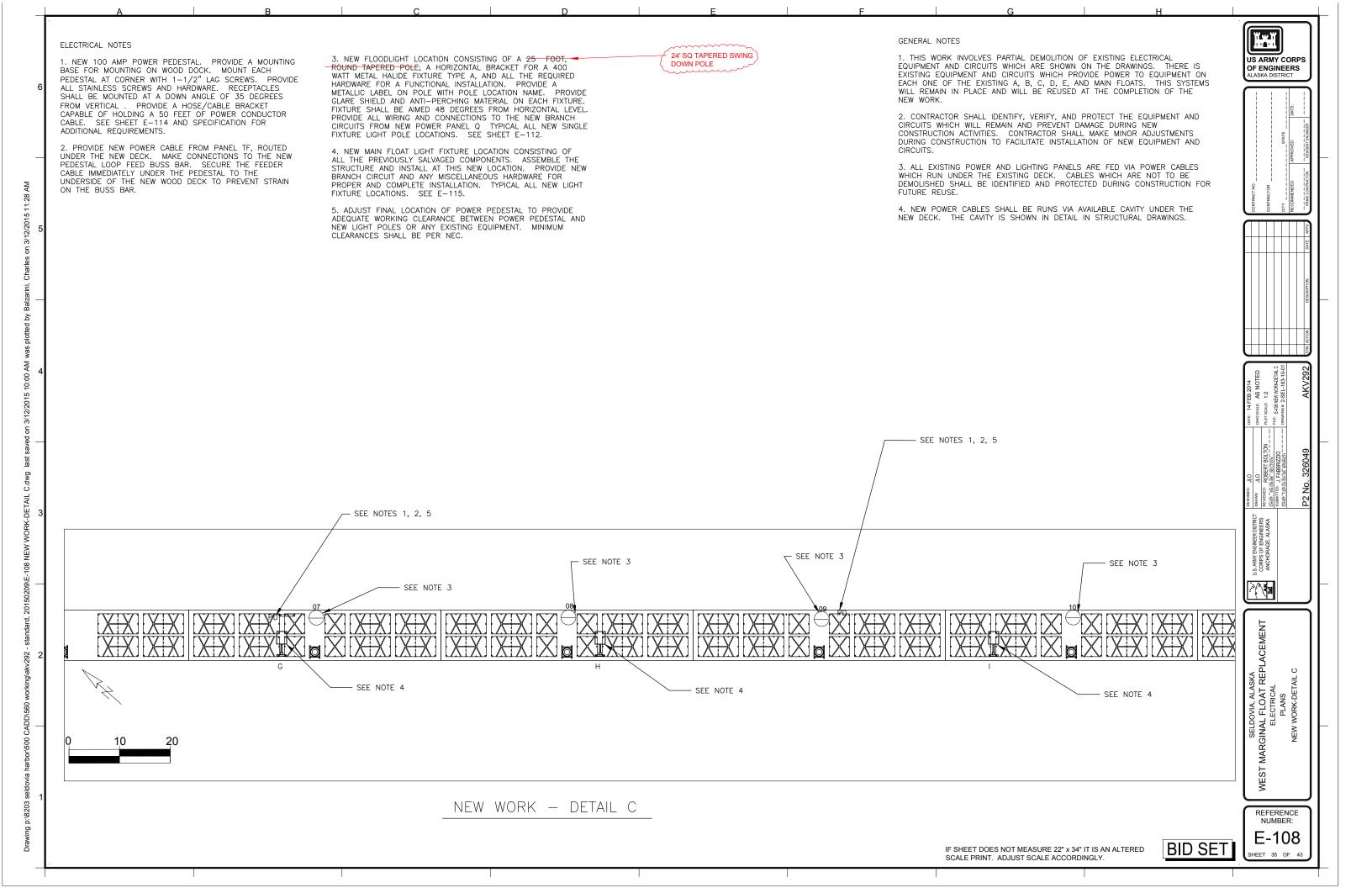
**BID SET** 

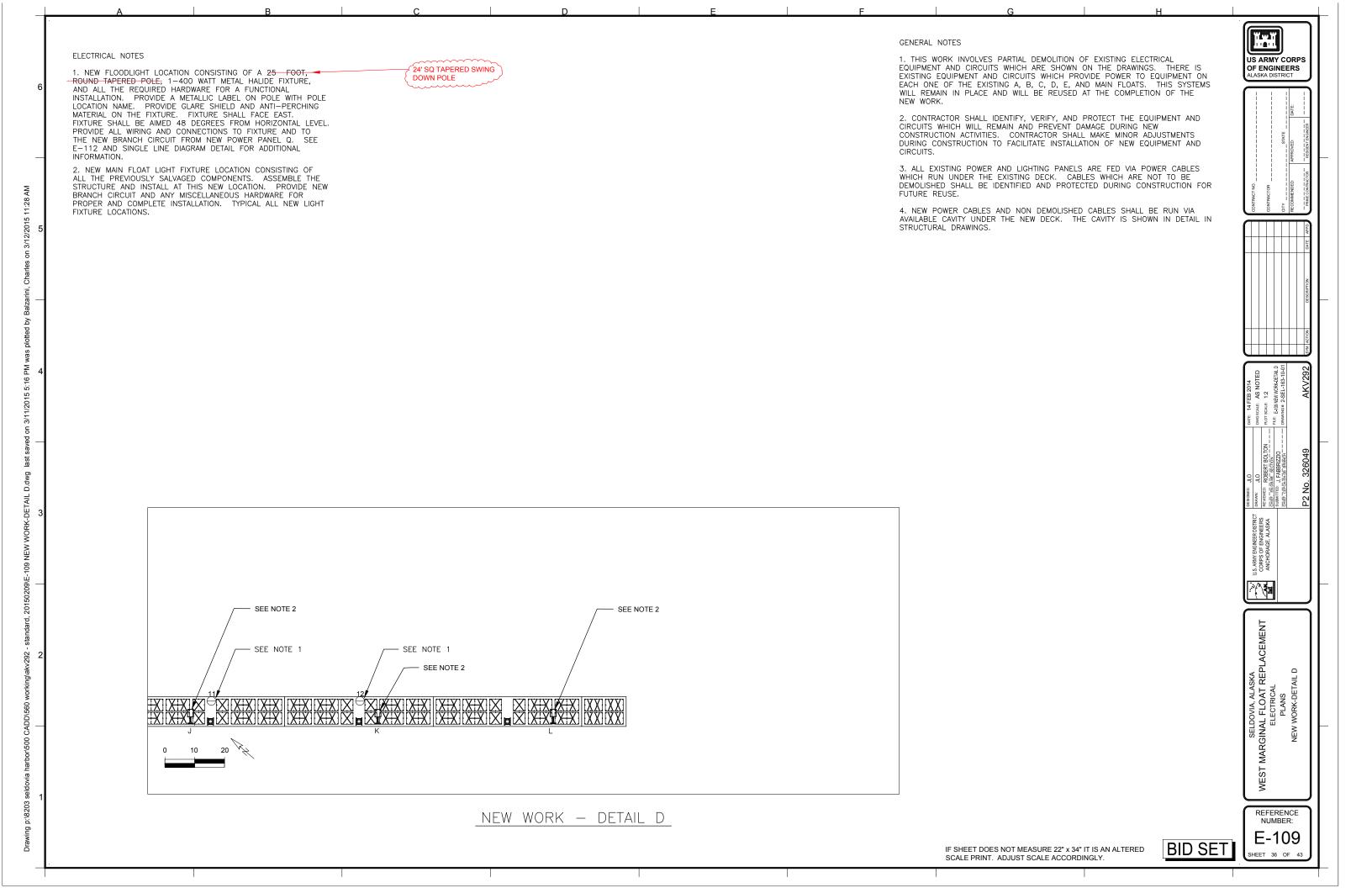
REFERENCE NUMBER: E-106

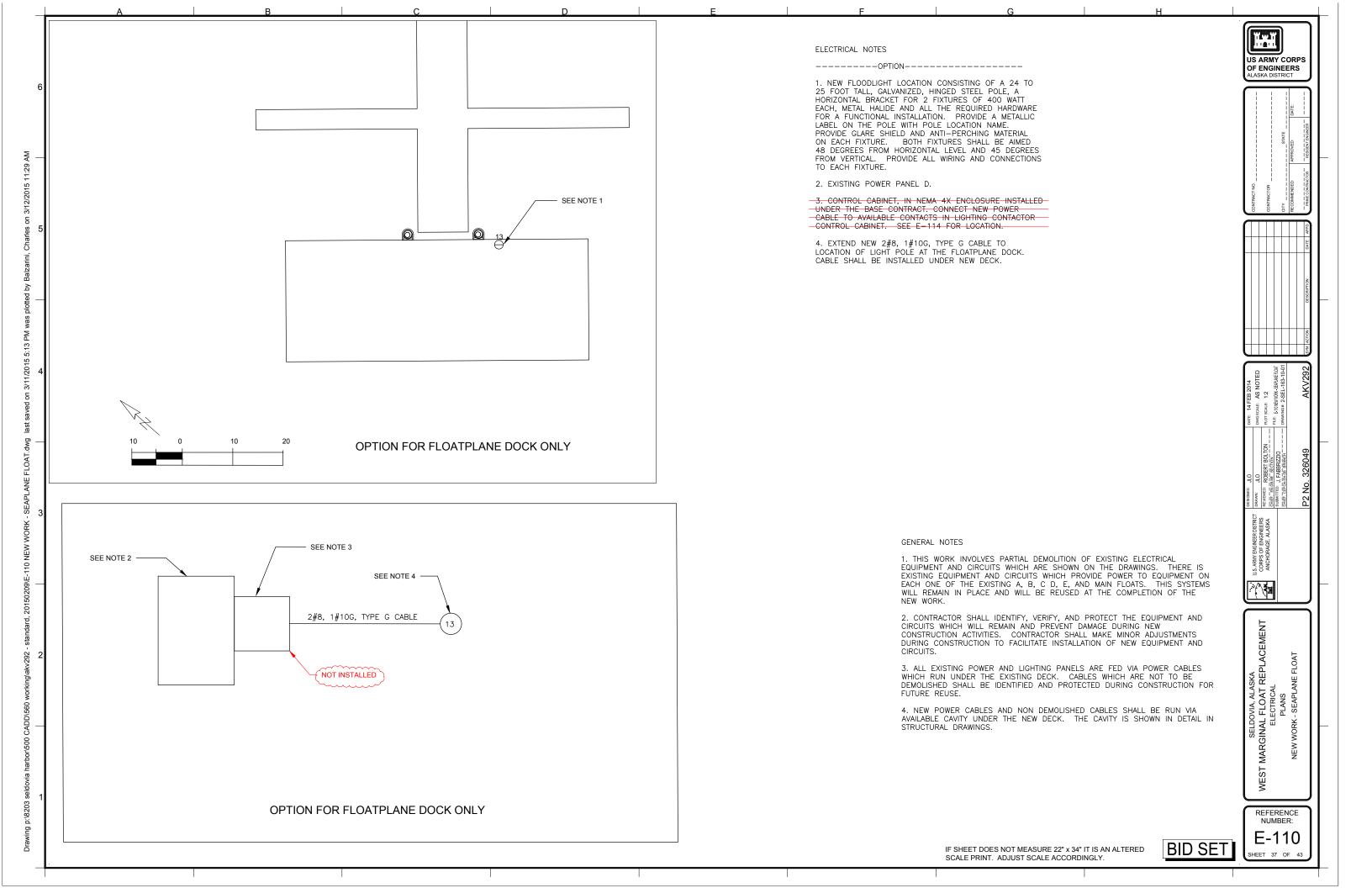
SHEET 33 OF 43

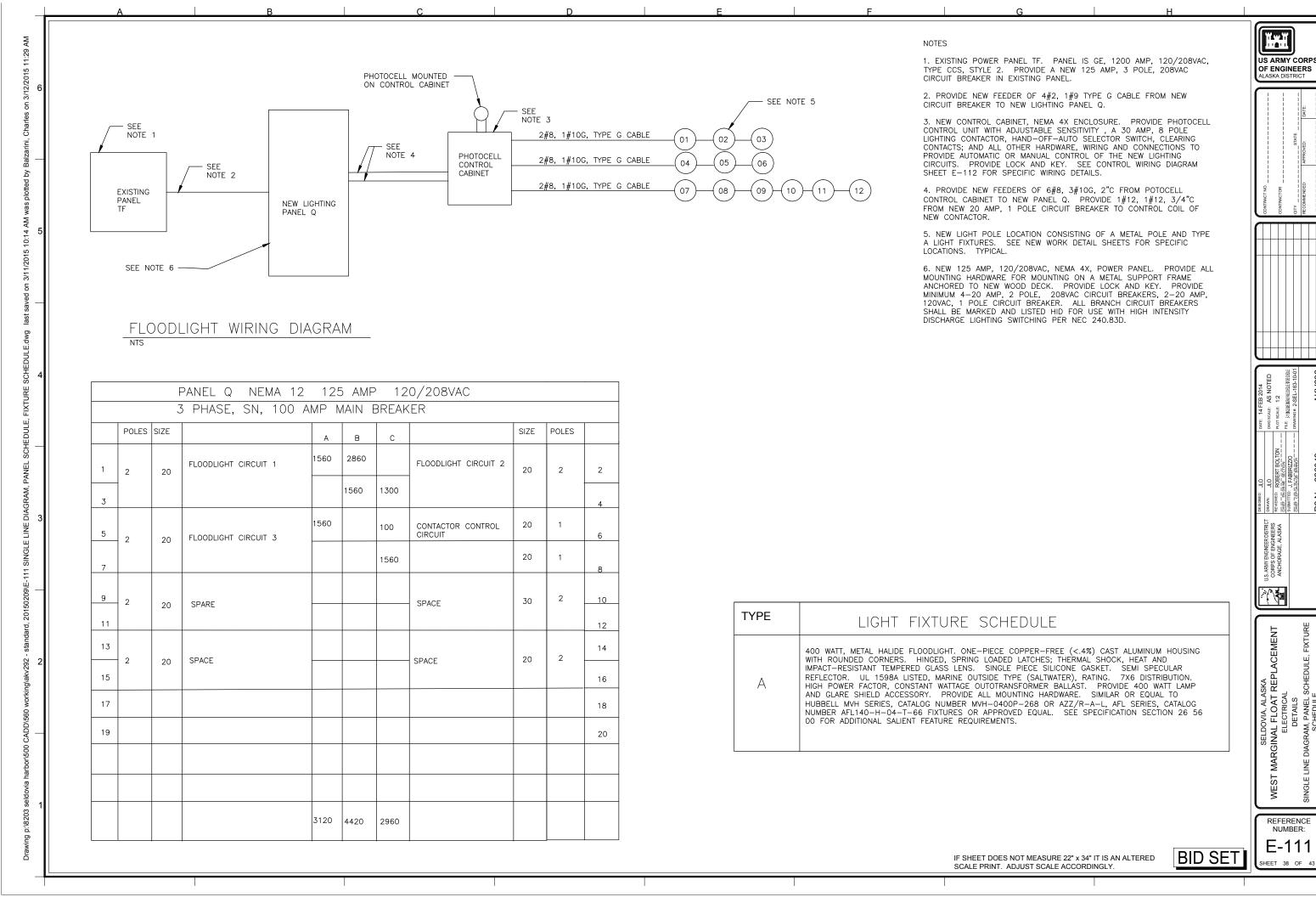
WEST



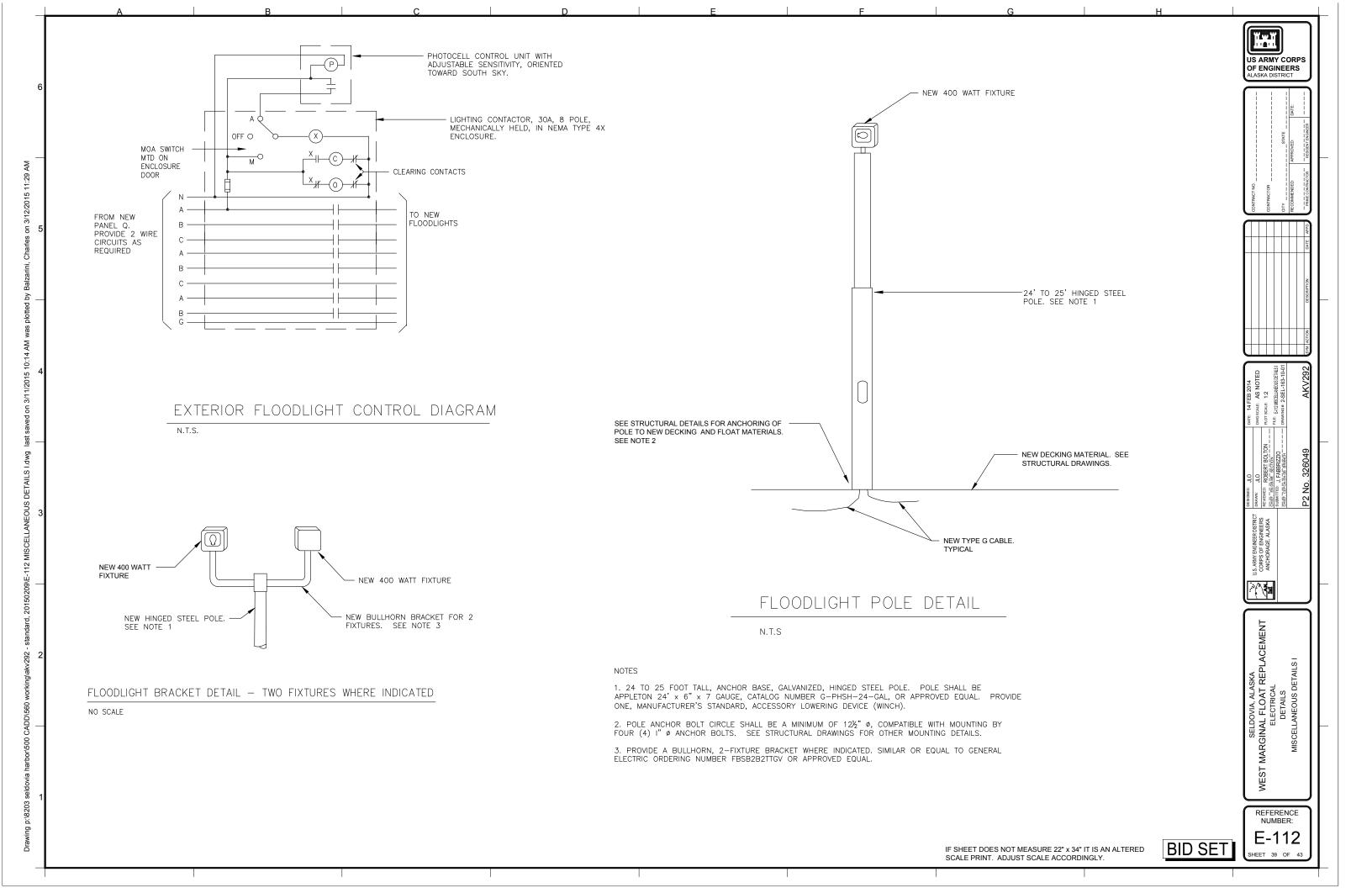


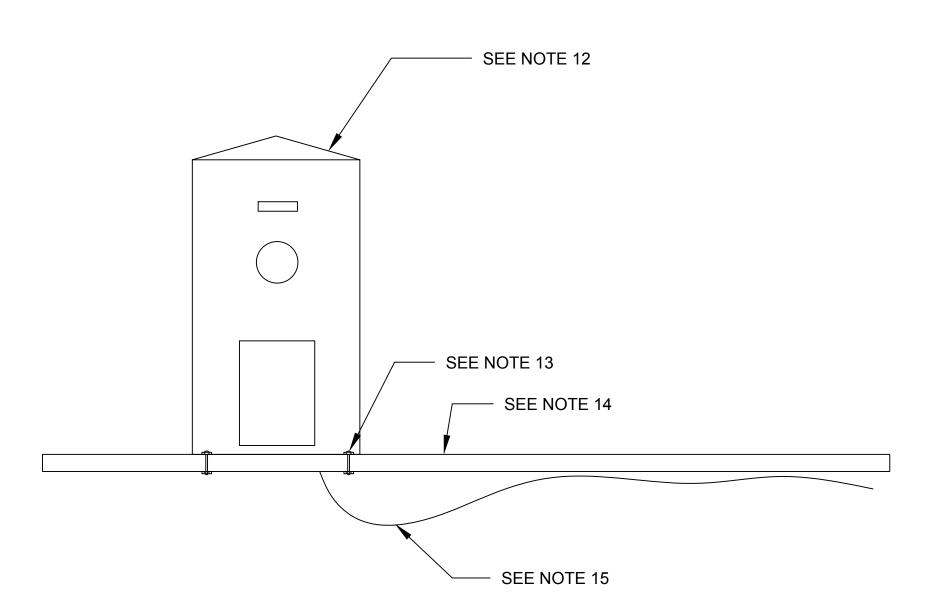






SELDOVIA, ALA MARGINAL FLOAT WEST REFERENCE NUMBER: E-111 SHEET 38 OF 43





POWER PEDESTAL INSTALLATION ON WOOD DECK

NOTES

1. 90 DEGREE ANGLE FITTING AND HARDWARE. TYPICAL ON ALL ANCHORING TO NEW DECKING MATERIAL.

2. P3001 1-5/8" CHANNEL SECTION. TYPICAL.

3. P1726 FLAT PLATE FITTING. PROVIDE ADDITIONAL PLATES AS REQUIRED TO MATCH EXACT DIMENSIONS AND MANUFACTURER MOUNTING REQUIREMENTS FOR PROPER SUPPORT. TYPICAL

4. NEW LIGHTING PANEL Q AND CONTACTOR. SEE OTHER DRAWINGS FOR SPECIFIC EQUIPMENT AND LOCATIONS.

5. P3000 1-5/8" CHANNEL SECTION. ADJUST THE HEIGHT OF THE CHANNELS TO MATCH THE MOUNTING REQUIREMENTS OF THE EQUIPMENT PER MANUFACTURER SPECIFICATIONS. PROVIDE ADDITIONAL CHANNELS AS REQUIRED TO MATCH EXACT DIMENSIONS AND MANUFACTURER MOUNTING REQUIREENTS OF THE EQUIPMENT PROVIDED. TYPICAL.

6. P2000 SERIES CONDUIT CLAMPS WITH HARDWARE TO FIT THE SPECIFIC CONDUIT SIZE AND QUANTITY. TYPICAL.

7. FEEDER AND BRANCH CIRCUIT CONDUITS AS REQUIRED. SEE SINGLE LINE DIAGRAM FOR SPECIFIC SIZES.

8. NEW BULL RAIL. SEE STRUCTURAL FOR DETAILS.

9. NEW FLOAT DRUMS. SEE STRUCTURAL FOR DETAILS.

10. NEW DECKING. SEE STRUCTURAL FOR DETAILS.

11. FIELD TREAT DECK BOARD OPENINGS FOR CONDUITS FOR A TIGHT SEAL.

12. NEW POWER PEDESTAL. SHALL BE SIMILAR OR EQUAL TO EATON LIGHTHOUSE—SS POWER PEDESTAL. PROVIDE BASE AND HARDWARE FOR INSTALLATION ON WOOD DECK. TYPICAL.

13. AT EACH CORNER OF THE BASE INSTALL A 1-1/2" LAG SCREW AND WASHER . PROVIDE ONLY STAINLESS BOLTS AND HARDWARE FOR THIS INSTALLATION. TYPICAL ALL NEW POWER PEDESTALS.

14. NEW WOOD DECK. SEE STRUCTURAL FOR ADDITIONAL DETAILS.

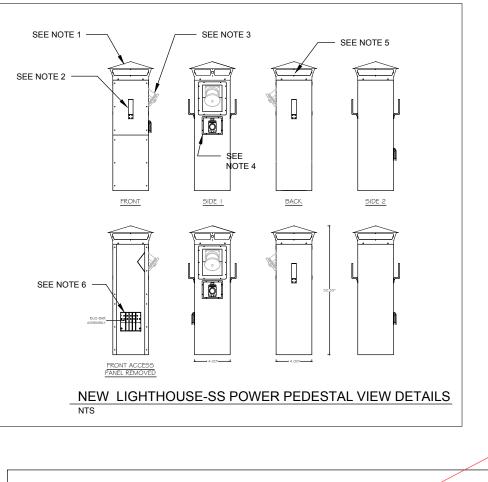
15. NEW POWER CABLE FEEDER. CABLE SHALL BE 4 CONDUCTOR, WITH GROUND, 3 POLE, 4 WIRE, TYPE G, UL RATED FOR 75 DEG C FOR WET LOCATIONS. TYPICAL FOR ALL POWER PEDESTALS FEEDERS. PROVIDE COMPRESSION TERMINALS AT ENDS OF LINE WIRES FOR INSTALLATION ON PEDESTAL STUD LUG CONNECTORS. SEE E-115 FOR CIRCUITS.

16. PROVIDE HOT DIP GALVANIZED (HG) FINISH PER ASTM A123 OR A 153, ON ALL SUPPORT MATERIALS AND HARDWARE. TYPICAL ALL SUPPORT MATERIALS AND HARDWARE

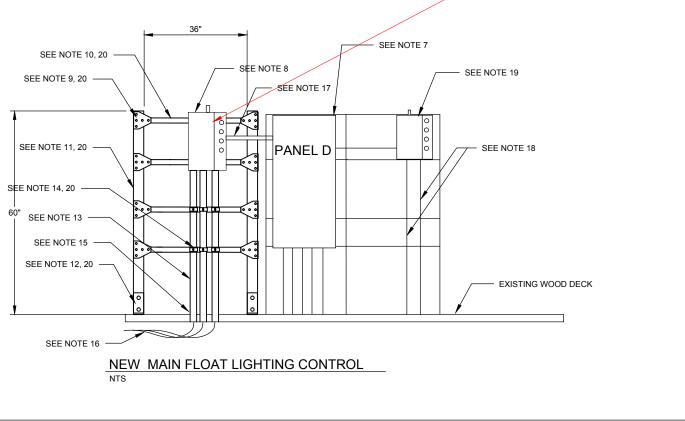
**US ARMY CORPS** OF ENGINEERS ALASKA DISTRICT

REFERENCE

IF SHEET DOES NOT MEASURE 22" x 34" IT IS AN ALTERED SCALE PRINT. ADJUST SCALE ACCORDINGLY.



PANEL NOT INSTALLED. COMPONENTS INSTALLED IN EXISTING PANEL P



- 1. NEW POWER PEDESTAL. SEE OTHER DRAWINGS FOR EXACT LOCATIONS AND INSTALLATION DETAILS.
- 2. CABLE LOOP HANDLES
- 3. 208VAC, 3 PHASE RECEPTACLE WITH COVER
- 4. 100 AMP CIRCUIT BREAKER AND ELECTRONIC METER ASSEMBLY
- 5. LIGHTING ASSEMBLY WITH FLUORESCENT BULBS
- 6. THREE PHASE, LOOP FEED BUSS BAR ASSEMBLY. TYPICAL ALL NEW POWER PEDESTALS.
- 7.: INSTALL NEW 3-2 POLE, 20 AMP CIRCUIT BREAKERS AND A 20 AMP, 1 POLE CIRCUIT BREAKER IN EXISTING PANEL D. SEE SHEET E-101 FOR EXACT LOCATION.
- 8. INSTALL NEW 30 AMP. 8 POLE. 240VAC. MECHANICALLY HELD LIGHTING CONTACTOR ON NEW METAL FRAME. PROVIDE NEW NEMA 4X ENCLOSURE AND 120VAC CONTROL CIRCUITRY. PROVIDE NEW PHOTOCELL CONTROL, ON-OFF-AUTO CONTROL SWITCH ON DOOR. PROVIDE ALL REQUIRED INTERNAL COMPONENTS AND CONNECTIONS FOR PROPER OPERATION OF LIGHT CIRCUIT. PROVIDE ALL REQUIRED HARDWARE FOR PROPER MOUNTING ON METAL SUPPORT FRAME.
- 9. P1726 FLAT PLATE FITTING. TYPICAL
- 10. P3000 1-5/8" CHANNEL SECTION. ADJUST THE HEIGHT OF THE CHANNELS TO MATCH THE MOUNTING REQUIREMENTS OF THE EQUIPMENT PER MANUFACTURER SPECIFICATIONS. PROVIDE
  ADDITIONAL CHANNELS AS REQUIRED TO MATCH EXACT DIMENSIONS
  AND MANUFACTURER MOUNTING REQUIREENTS OF THE EQUIPMENT PROVIDED. TYPICAL
- 11. P3001 1-5/8" CHANNEL SECTION. TYPICAL.
- 12. 90 DEGREE ANGLE FITTING AND HARDWARE. TYPICAL ON ALL ANCHORING TO MEW DECKING MATERIAL. TYPICAL
- 13. NEW 2" PVC, SCH 40 CONDUIT WITH TYPE & POWER CABLE TO LOCATION OF NEW LIGHT POLES ON MAIN FLOAT. TYPICAL
- 14. P2000 SERIES CONDUIT CLAMPS WITH HARDWARE TO FIT THE SPECIFIC CONDUIT SIZE AND QUANTITY. TYPICAL.
- 15. FIELD TREAT DECK BOARD OPENINGS FOR CONDUITS FOR A TIGHT SEAL.
- 16. NEW POWER CABLE FEEDER. CABLE SHALL BE 3 CONDUCTOR, TYPE S, UL RATED FOR WET LOCATIONS. TYPICAL
- 17. NEW 4#8, 2#10, 2#10G, 1#12G, 2" SCH 40 PVC CONDUIT, AND 1#12, 1#12G 3/4" PVC CONDUIT FROM NEW CIRCUIT BREAKERS TO NEW LIGHTING CONTACTOR.
- 18. EXISTING POWER CIRCUITS FOR EXISTING LIGHT PEDESTALS ON FLOAT C, SHORE POWER PEDESTALS ON FLOAT D AND FLOAT E. HARBOR MASTER STORAGE FLOAT, AND THE FIRE STORAGE FLOAT. PROTECT THESE EXISTING CIRCUITS DURING CONSTRUCTION AS THEY REMAIN IN USE.
- 19. EXISTING LIGHTING CONTACTOR ADJACENT TO LIGHTING PANEL D TO REMAIN. PROTECT THIS EQUIPMENT DURING CONSTRUCTION AS IT WILL REMAIN IN USE. DISCONNECT EXISTING MAIN FLOAS POLE MOLINTED. LIGHTING FROM EXISTING LIGHTING CONTACTOR. CONTACTOR AND REMAINING CIRCUITS AND COMPONENTS SHALL REMAIN FOR USE.
- 20. PROVIDE HOT DIP GALVANIZED (HG) PER ASTM A 123 OR A 153 ON ALL SUPPORT AND HARDWARE MATERIALS.

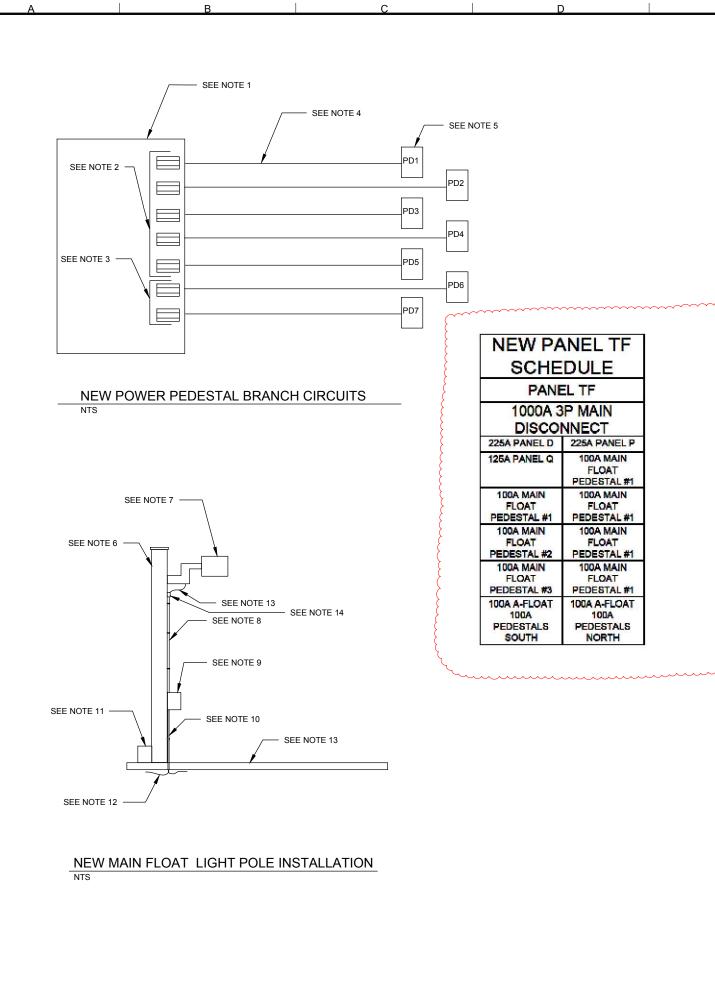
JS ARMY CORPS OF ENGINEERS

REFERENCE NUMBER: E-114

HEET 41 OF 43

WEST

**BID SET** 



EXISTING

PANEL P

REVISED

SCHEDULE

PANEL P

NOTE C-FLOAT PEDESTAL WAS

REINSTALLED

125A 3P

A-FLOAT 50A

PEDESTALS

60A 3P SPARE

100A 3P

A-FLOAT 30A

PEDESTALS!

60A 3P SPARE

125A 3P

B-FLOAT NORTH

30A PEDESTALS

60A 3P SPARE

\*30A 2P

C-FLOAT

PEDESTAL

BLANK

100A 3P

**B-FLOAT 30A** 

PEDESTALS

NOTES

- 1. EXISTING POWER PANEL TF TO REMAIN. PANEL TF IS A 1200 AMP 120/208VAC, 3 PHASE, 4 WIR4E, TYPE CCS STYLE 2. SEE SHEET E-101 AND E-103 FOR EXACT LOCATION.
- 2. FIVE EXISTING 100 AMP, 3 POLE CIRCUIT BREAKERS SERVING EXISTING 208VAC POWER PEDESTAL WILL BE REUSED. CONNECT NEW POWER CABLES TO EXISTING CIRCUIT BREAKERS
- 3. INSTALL 2 NEW 100 AMP, 3 POLE, 208VAC CIRCUIT BREAKERS IN EXISTING SPACES FOR NEW POWER CABLES FOR NEW POWER PEDESTALS.
- 4. INSTALL NEW 4 CONDUCTOR, 4#2/0, 1#6G, 3 PHASE, TYPE G POWER CABLE FROM EXISTING AND NEW CIRCUIT BREAKERS IN PANEL TF AND EXTEND UNDER NEW DECK TO LOCATION OF EACH NEW POWER PEDESTAL. PORTIONS OF CABLE ABOVE NEW DECK SHALL BE ENCLOSED IN 2" SCH 40
- 5. NEW 100 AMP, 3 PHASE POWER PEDESTALS LOCATED ALONG NEW FLOAT DECK. SEE NEW WORK DETAIL PLAN A, B, AND C FOR EXACT LOCATION OF EACH PEDESTAL. TYPICAL
- 6. SALVAGED 6X6 WOOD LIGHT POLE. INSTALL AT EACH LOCATION SHOWN ON SHEETS E-106 THRU E-109. TYPICAL ALL WOOD POLE MOUNTED LIGHT POLE
- 7. SALVAGED 175 WATT MH LIGHT FIXTURE AND MOUNTING HARDWARE. INSTALL ON POLE AT SAME HEIGHT. PROVIDE ANY OTHER REQUIRED HARDWARE FOR PROPER INSTALLATION
- 8. PROVIDE NEW 3/4" PVC SCH 40 CONDUIT FROM JUNCTION BOX TO LIGHT FIXTURE. PROVIDE NEW CLAMPS AND MOUNTING HARDWARE.
- 9. SALVAGED JUNCTION BOX AND MOUNTING HARDWARE. INSTALL MINIMUM 36" ABOVE DECK. PROVIDE REQUIRED MOUNTING HARDWARE. SPLICE INCOMING POWER CABLES TO BRANCH CABLES FOR LIGHT FIXTURES.
- 10. PROVIDE 2 NEW 2" CONDUITS FOR NEW POWER CABLES. ONE CONDUIT FOR INCOMING CABLE AND ONE CONDUIT FOR OUTGOING CABLE TO NEXT LIGHT POLE. CONDUITS SHALL BE ANCHORED TO WOOD POLE WITH METAL CHANNELS AND CONDUIT CLAMPS. CONDUITS SHALL BE SECURED AND EXTENDED THRU THE WOOD DECK.
- 11 NEW WOOD BUILL RAIL. SEE STRUCTURAL DRAWINGS. PROVIDE ANCHORING AND MOUNTING HARDWARE TO SECURE THE WOOD POLE THRU THE WOOD DECK AND TO BULL RAIL. SEE STRUCTURAL DRAWINGS FOR
- 12. NEW INCOMING AND OUTGOING POWER CABLES. SECURE CABLES UNDER THE NEW WOOD DECK AT THIS LOCATION AND ALONG THE DECK TO NEXT LIGHT POLE. TYPICAL ALL LIGHTING POWER CABLES
- 13. NEW 3/4" LIQUID TIGHT FLEX CONDUIT EXTENDED FROM PVC CONDUIT TO LIGHT FIXTURE CONNECTION ARM
- 14. NEW WEATHERPROOF, SINGLE GANG JUNCTION BOX. MINIMUM SIZE4.5"X2"X2.75".

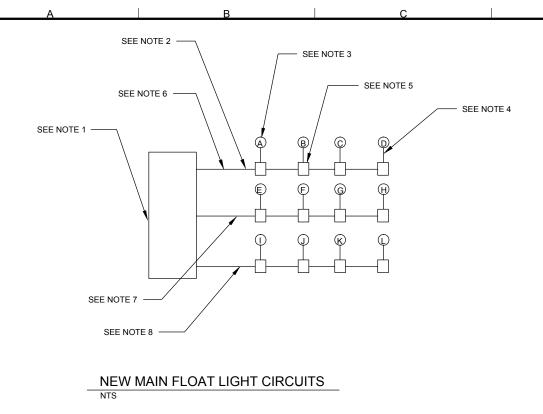
JS ARMY CORPS OF ENGINEERS ALASKA DISTRICT

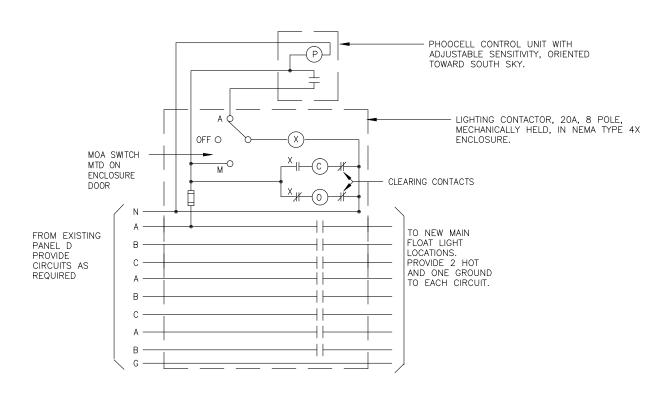
WEST REFERENCE NUMBER: E-115

HEET 42 OF 43

**BID SET** 

IF SHEET DOES NOT MEASURE 22" x 34" IT IS AN ALTERED SCALE PRINT. ADJUST SCALE ACCORDINGLY.

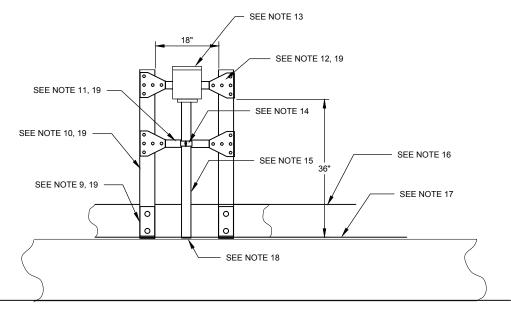




MAIN FLOAT LIGHTING CONTROL DIAGRAM N.T.S.

NOTES

- 1. NEW LIGHTING CONTACTOR INSTALLED UNDER BASE CONTRACT NEAR EXISTING LIGHTING PANEL D.
- 2. NEW 3 CONDUCTOR TYPE G POWER CABLES. PORTIONS OF CABLE ABOVE WOOD DECK SHALL BE ENCLOSED IN 2" SCH 40 PVC CONDUIT. PREPARE WOOD AROUND CONDUIT FOR TIGHT FITTING AND
- 3. SALVAGED LIGHT FIXTURE TO BE INSTALLED AT NEW LOCATION.
- 4. NEW 2#12, 1#12G, 3/4" PVC CONDUIT FROM JUNCTION BOX TO LIGHT FIXTURE. PROVIDE ALL CLAMPS AND MOUNTING HARDWARE FOR PROPER ATTACHMENT TO WOOD POLE. TYPICAL
- 5. SALVAGED JUNCTION BOX TO BE INSTALLED MINIMUM 30" FROM DECK SURFACE. PROVIDE ALL REQUIRED MOUNTING HARDWARE FOR PROPER INSTALLATION ON WOOD POLE. TYPICAL
- 6. 3 CONDUCTOR #8 (2#8, 1#10G) TYPE G CABLE.
- 7. 3 CONDUCTOR #8 (2#8, 1#10G) TYPE G CABLE.
- 8. 3 CONDUCTOR #10 (2#10, 1#12G) TYPE G CABLE.
- 9. 90 DEGREE ANGLE FITTING AND HARDWARE. TYPICAL ON ALL ANCHORING TO NEW DECKING
- 10. P3001 1-5/8" CHANNEL SECTION. TYPICAL.
- 11. P3000 1-5/8" CHANNEL SECTION.
- 12. P1726 FLAT PLATE FITTING. TYPICAL
- 13. NEW 20 AMP, 120VAC, NEMA 5-20R, CFCI, DUPLEX RECEPTACLE IN A WEATHERPROOF, MARINE RATED, STEEL BOX WITH LOCKABLE COVER.
- 14. P2000 SERIES CONDUIT CLAMPS WITH HARDWARE TO FIT THE SPECIFIC CONDUIT SIZE AND QUANTITY. TYPICAL.
- 15. 1#12, 1#12G, TYPE G CABLE IN 2" SCH 40 PVC CONDUIT FROM NEW PANEL Q. PORTION OF CABLE BELOW DECK SHALL BE 3 CONDUCTOR CABLE.
- 16. NEW BULL RAIL. SEE STRUCTURAL FOR DETAILS.
- 17. NEW DECKING. SEE STRUCTURAL FOR DETAILS.
- 18. FIELD TREAT DECK BOARD OPENINGS FOR CONDUITS FOR A TIGHT SEAL.
- 19. PROVIDE HOT DIP GALVANIZED (HG) PER ASTM A123 OR A 153 ON ALL SUPPORT MATERIALS AND HARDWARF



NEW DUPLEX RECEPTACLE INSTALLATION

**BID SET** 

RICAL DET

SELDO MARGINAL I

WEST

REFERENCE NUMBER: E-116

HEET 43 OF 43

WW.Y

US ARMY CORPS OF ENGINEERS ALASKA DISTRICT